U.S. Department
of Transportation
**Federal Aviation
Administration**

SDR Summary

Service Difficulty Reporting

December 7, 1997 - December 13, 1997

GENERAL AVIATION, ZAC-327

You can improve Air Safety by reporting the problem when you see it!

SECTION

ISSUE: 97-50

U.S. Department of Transportation
Federal Aviation Administration

SDR SUMMARY

General Aviation, ZAC-327

This summary includes domestic (United States) Service Difficulty Reports (SDRs) entered into the data base for aircraft weighing 12,500 lbs. and below. It also includes reports on aeronautical products (engines, propellers, and components), and all helicopters. A separate section for International SDRs for aircraft weighing 12,500 lbs. and under has also been included. Under a data exchange agreement, International SDRs are submitted to the FAA by the Civil Aviation Authority of other countries (currently, Canada - CAN, and Australia - AUS). All reports are sorted by aircraft make, model group (basic model), and Joint Aircraft System/Component (JASC) code. Within each aircraft model group, the specific model shown may vary, but similar types of reports will be grouped together and listed in ascending order by their JASC code. Each field contains all information submitted to the FAA. Some fields are not included in order to make the summary easier to read. Additional information may be obtained by referring to the "operator control number." Send your request to the Aviation Data Systems Branch, AFS-620 at the address or phone below.

The Regulatory Support Division (AFS-600) has established a "HomePage" on the Internet through which the same information is available. There is a large quantity of other information available through the AFS-600 HomePage such as the most current SDR system codes (i.e., Joint Aircraft System\Component Codes). The SDR Question and Answer Section of the Summary will also be transferred to the AFS-600 HomePage to simplify the process of preparing the SDR Summaries in the PDF format each week. There are "hot buttons" to take you to other locations and sites where FAA Flight Standards Service Information is available. The AFS-600 "HomePage" address is:

http://www.mmac.jccbi.gov/afs/afs600

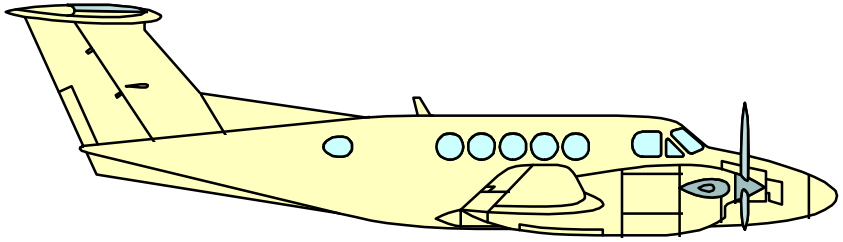
"The Service Difficulty Reports in this publication are derived from unverified information submitted by the aviation community without FAA verification for accuracy. The number of SDRs submitted is not an indication of the mechanical reliability or fitness of an airline or individual operator, and the information should not be used as such."

Comments are welcomed and may be directed to:

Federal Aviation Administration
Aviation Data Systems Branch, AFS-620
P.O. Box 25082
Oklahoma City, OK 73125-5029
Phone: (405) 954-4171, Fax: (405) 954-4748

Your continued participation is essential and is an integral part of ensuring aviation safety. Thank you for supporting the Service Difficulty Program! If you have any questions regarding this special notice you can contact John Jackson at (405) 954-6486, or Jim Gillespie at (405) 954-1141, or Blake McDonald at (405) 954-0307 in the Aviation Systems Branch (AFS-620). Their E-mail addresses are:

john_e_jackson@mmacmail.jccbi.gov **james_gillespie@mmacmail.jccbi.gov** **blake_mcdonald@mmacmail.jccbi.gov**



SIGNIFICANT OCCURRENCE REPORT

U.S. Department
of Transportation
Federal Aviation Administration

THE SIGNIFICANT OCCURRENCE REPORT

The Significant Occurrence Report is a compilation all of the star bordered reports that appear in the General Aviation Service Difficulty Report (SDR) Summary, ZAC-327. The Significant Occurrence Report is used to highlight industry problem areas to field inspectors and the aviation public.

Limited analysis is performed by the Aviation Data Systems Branch, AFS-620 during the preparation of the "Significant Occurrence Report", which is generated each week and is included in the front of the Air Carrier SDR Summary. Significant Reports are hand selected by AFS-620's inspectors based on the individual merit of each report. The criteria for selection includes, but is not limited to, items that indicate high failure rates; items related to accidents or incidents; or design or maintenance failures which may affect the safe operation of the aircraft.

In some cases, this limited analysis of SDR data leads to the preparation of information bulletins which are routed to the appropriate product certification office for further investigation of the problem. The end result may be the issuance of an airworthiness directive (AD) by the Aircraft Certification Service (AIR) if warranted.

The Significant Occurrence Report (section I) of the weekly SDR Summary is not intended to be a summary of all significant events and should not be used as such. We recommend that you review further the applicable sections of the SDR summary that may be of interest.

GENERAL AVIATION SIGNIFICANT OCCURRENCE REPORT

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
3020	564CA	BEECH				ANTI ICE TUBE	BROKEN	5496	11/14/97
	BE58	B100					LT ENG INTAKE	233	97ZZZX5044
*****	LEFT ENGINE FLAME-OUT AT 7,000 FEET HOLDING AT FLYING COLD IN ICING CONDITION. INTAKE ANTI-ICE HAD BEEN ON FOR HALF AN HOUR. FOUND ONE ANTI-ICE TUBE FLARE BROKEN OFF. SUSPECT SOME LOSS OF BLEED AIR IN THIS AREA COULD HAVE ATTRIBUTED TO ICE FORMING ON INTAKE LIP AND COMING DISLODGED PRIOR TO FLAME-OUT. AIRCRAFT IS OPERATED BY CARVER AERO, INC.								
7210		BEECH	PWA			PLANETARY GEAR	SEPARATED		6/29/97
		200BEECH	PT6A41			310152501	REDUCTION GEARBX	2370	CA970916003
*****	(CAN) DURING FLIGHT A CHIP DETECTOR LIGHT CAME ON NR2 ENGINE. THE ENGINE WAS SHUTDOWN AND THE FLIGHT CONTINUED TO DESTINATION. POST FLIGHT INSPECTION FOUND METAL IN THE OIL FILTER. THE ENGINE WAS SENT FOR INVESTIGATION AND DISASSEMBLY OF THE REDUCTION GEARBOX ASCERTAINED THE MAIN DAMAGE AND PROBABLE SOURCE OF THE METAL PARTICLES ON THE CHIP DETECTOR WAS A PIECE OF METAL MISSING FROM THE END OF ONE TOOTH ON ONE OF THE 1ST STAGE PLANET GEARS. THIS WAS NO DISCOLORATION OF THE CARRIERS OR OTHER COMPONENTS INDICATING LACK OF LUBRICATION. CLOSER INSPECTION OF THE 1ST STAGE PLANET GEARS AND THE SUN GEARS REVEALED SIGNIFICANT SPALLING ON THE TEETH, WHICH LED TO FAILURE AND METAL CONTAMINATION.								
7250		BEECH	PWA	PWA		BOLT	WRONG PART	566	9/18/97
		65A90	PT6A20	3020259		MS956508	CT SHROUD ASSY		CA970922020
*****	(CAN) DURING INSPECTION BOLTS ON THE COMPRESSOR TURBINE SHROUD ASSEMBLY HOUSING WERE FOUND DEFORMED WITH MATERIAL LOSS. INVESTIGATION FOUND THE BOLTS USED IN THIS INSTALLATION WERE THE WRONG PART.								
7250	2138Y	BELL	ALLSN			TURBINE	COKED	13208	10/21/97
	45639	206L1	250C28B			23033185	SCAV OIL PORT	785	97ZZZX4973
*****	FIVE MINUTES AFTER TAKEOFF, PILOT NOTICED OIL PRESSURE GAUGE FLUCTUATED FROM 60 PSI - 130 PSI AT A STEADY RATE. DURING A PRECAUTIONARY LANDING, THE TORQUE FLUCTUATED ABOUT 10 PERCENT. UPON INITIAL INVESTIGATION, THE OIL RESERVOIR WAS WAY DOWN AND THE EXHAUST COLLECTOR WAS VERY WET WITH OIL. SPECULATION - NR 6 AND NR 7 SCAVENGE STRUT BECAME PLUGGED AND THE PUMP FORCED OIL THROUGH SEAL INTO THE TURBINE AND PUMPED IT OVERBOARD. TURBINE ASSEMBLY WAS CHANGED.								
5531	691DB	CESSNA				SPAR	CRACKED		11/17/97
	177RG1314	177RG				17330021	VERTICAL FIN		97ZZZX5104
*****	VERTICAL FIN SPAR CRACKED ON BOTH SIDES RIGHT BEHIND TOP RUDDER HINGE. CRACKS MEASURE CLOSE TO .75 INCH ON BOTH SIDES. VERTICAL FIN NOT DISTORTED AND RUDDER HINGE SHOWS NO DAMAGE. CAUSE OF CRACKS UNKNOWN.								
2720	995RA	CESSNA				ROD END	FAILED	3084	11/11/97
	U20604252	U206G				12606311	RUDDER BAR		97ZZZX5111
*****	DURING PRE-FLIGHT INSPECTION, EXCESSIVE FREE MOVEMENT IN RUDDER WAS NOTED. FURTHER INVESTIGATION REVEALED THE ROD END BETWEEN THE RUDDER BAR AND BUNGEE HAD CRACKED OFF. THE PART SHOWED EVIDENCE OF HAVING BEEN CRACKED FOR A WHILE. THIS PART SEEMS TO BE VERY SMALL FOR THE STRESS IT COMES UNDER. SUBMITTER RECOMMENDS TOUGHER MATERIAL OR INCREASED SIZE. THIS IS THE FOURTH BROKEN ROD END SUBMITTER HAS FOUND ON U206 SERIES AIRCRAFT.								
5751	738FX	CESSNA				BEARING	FROZEN	996	10/31/97
	208B0482	208B				MS244624	LT AIL OB HINGE		97ZZZX5039
*****	DURING INSPECTION, AILERON CONTROL WAS DISCOVERED TO HAVE UNUSUALLY HIGH RESISTANCE. RESISTANCE WAS EVENTUALLY ISOLATED TO THE LEFT AILERON. BOTH BEARINGS WERE REPLACED AND THE OUTBOARD BEARING WAS FOUND ALMOST FROZEN WITH CORROSION. THESE ARE SEALED BEARINGS AND HAD NO OUTWARD SIGNS TO INDICATE A PROBLEM. NO REASON FOR THE CORROSION WAS NOTED.								
7160	29076	CHRIS				AIR BOX	WORN	490	11/12/97
	1022	A1				35453	VALVE SHAFT		97ZZZX5038
*****	AIR INTAKE BOX SHAFT, ARM AND SLEEVE BUSHINGS FOUND BADLY WORN. APPEARS TO BE CAUSED BY ENGINE VIBRATION EVEN THOUGH PROPELLER WAS BALANCED AT 532.5 HRS TO .013 IPS. BOX BY DESIGN IS NOT REPAIRABLE DUE TO SHAFT WELDED TO PLATE. SUBMITTER RECOMMENDED BOX BE RE-DESIGNED BY MFG TO INCORPORATE SEALED BALL OR NEEDLE BEARINGS AND PLATE BE ATTACHED TO SHAFT USING MACHINE SCREWS AND NUTS ALLOWING FOR FIELD REPAIRS OF BOX ASSY.								

******* DENOTES SIGNIFICANT OCCURRENCE**

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
5540	272HJ	PIPER				HINGE	SEIZED	3572	11/25/97
	317712055	PA31310				51108004	RUDDER		97ZZZX5099
*****	FOUND THE RUDDER TOP HINGE BOLT SEIZED IN THE HINGE BEARING AND COULD NOT BE FREED. BOTH HINGE ASSEMBLIES (THE RUDDER AND VERTICAL STABILIZER) HAD TO BE REPLACED. THE CORROSION WAS SEVERE AND THERE WAS NO EVIDENCE OF LUBRICATION.								
3230	311AC	PIPER				BRACKET	CRACKED	3700	11/26/97
	31T8120016	PA31T					MLG UPLOCK		97ZZZX5041
*****	MAIN LANDING GEAR UPLOCK SUPPORT BRACKET CRACKED ALLOWING UPLOCK HOOK TO LOCK SIDEWAYS LODGING BETWEEN ROLLER AND GEAR LEG. LEFT MAIN GEAR WOULD NOT EXTEND UNTIL AIRCRAFT WAS PUT THROUGH NEGATIVE GRAVITY. SECOND AIRCRAFT FOUND WITH THIS PROBLEM.								
5743	19SW	PIPER				TRUNNION BRACKET	LOOSENED	7650	11/13/97
	347250119	PA34200				67041	MLG MOUNT		97ZZZX5042
*****	INSPECTION FOUND THE MLG TRUNNION MOUNTING BOLTS LOOSE ON THEIR BRACKETS. THIS LOOSENING CAUSES THE HOLES IN THE WING SPAR TO ELONGATE. SUBMITTER STATED THEY HAVE FOUND THE BOLTS LOOSE REGULARLY ON ALL OF FLEET PA28R AND PA34 AIRCRAFT.								
7603	9091J	PIPER				CABLE ASSY	PARTED	3446	9/11/97
S88R	425501035	PA42720				5697905	NR 1 THROTTLE		97ZZZX5112
*****	DURING PRE-FLIGHT OPERATIONAL CHECKS, THE LEFT ENGINE THROTTLE CABLE STAINLESS STEEL RIBBON CORE PARTED WHERE THE CABLE PASSES THROUGH A CUT-OUT IN THE AILERON BELLCRANK RT MOUNTING BRACKET. ENGINE CONTROL WAS LOST AND THE MISSION ABORTED. INVESTIGATION REVEALED THE CABLE INSTALLATION VIOLATED THE 7 INCH MINIMUM BEND RADIUS AT THE POINT OF PARTING. THE CUT-OUT AREA IN THE BRACKET WAS SUBSEQUENTLY ENLARGED TO RELIEVE THE CABLE BEND. THE CABLE ASSEMBLY WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE.								
2215	9284X	PIPER			KING	SCREWS	LOOSENED	235	11/7/97
	4636087	PA46350P			KS270A	089606705	PITCH SERVO		97ZZZX5040
*****	SERVO NOT WORKING PROPERLY. REMOVED FROM AIRCRAFT AND FOUND THREE SCREWS BACKED OUT UNTIL THEY HIT PLATE 073-0515-03. SCREWS NEED LOCTITE.								

(End of GENERAL AVIATION SIGNIFICANT OCCURRENCE REPORT)

Run Date: 18-Dec-97

FEDERAL AVIATION ADMINISTRATION
SIGNIFICANT OCCURRENCE REPORT INDEX

Showing Specific Part Numbers and Aircraft Model by Year

FOR THE PERIOD OF: 12/7/97 To 12/13/97

PART NUMBER / PART NAME	ACFT MODEL	TOTAL	YEAR 1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
089606705													
SCREWS	PA46350P	**1**	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 089606705		**1**	-	-	-	-	-	-	-	-	-	-	1
12606311													
ROD END	207	**1**	-	-	-	-	1	-	-	-	-	-	-
	U206G	**3**	-	-	-	-	1	-	-	-	-	1	1
TRIM ROD END	U206G	**1**	-	-	-	-	-	-	-	-	-	1	-
TOTAL of # 12606311		**5**	-	-	-	-	2	-	-	-	-	2	1
162J													
CONNECTOR	FALCON900	**1**	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 162J		**1**	-	-	-	-	-	-	-	-	-	-	1
17330021													
SPAR	177RG	**1**	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 17330021		**1**	-	-	-	-	-	-	-	-	-	-	1
23033185													
TURBINE	206L1	**1**	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 23033185		**1**	-	-	-	-	-	-	-	-	-	-	1
265201051													
INLET	35A	**1**	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 265201051		**1**	-	-	-	-	-	-	-	-	-	-	1
3034038													
VALVE	unknown	**1**	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 3034038		**1**	-	-	-	-	-	-	-	-	-	-	1
310152501													
PLANETARY GEAR	200BEECH	**1**	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 310152501		**1**	-	-	-	-	-	-	-	-	-	-	1

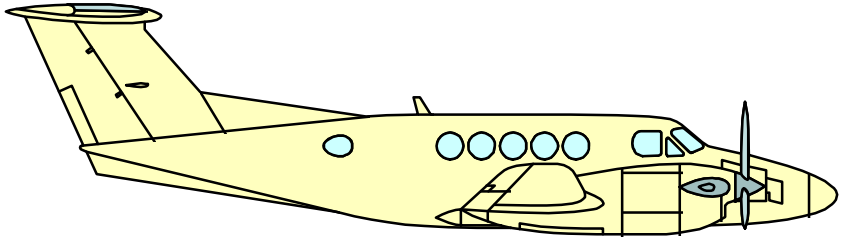
PART NUMBER / PART NAME	ACFT MODEL	TOTAL	YEAR 1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
35453													
AIR BOX	A1	**1**	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 35453		**1**	-	-	-	-	-	-	-	-	-	-	1
51108004													
HINGE	PA31310	**1**	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 51108004		**1**	-	-	-	-	-	-	-	-	-	-	1
5583112140													
DRAIN CABLE	FALCON900	**1**	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 5583112140		**1**	-	-	-	-	-	-	-	-	-	-	1
5697905													
CABLE ASSY	PA42720	**1**	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 5697905		**1**	-	-	-	-	-	-	-	-	-	-	1
67041													
TRUNNION BRACKET	PA34200	**1**	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 67041		**1**	-	-	-	-	-	-	-	-	-	-	1
785265													
BLADE	340B	**1**	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 785265		**1**	-	-	-	-	-	-	-	-	-	-	1
7911004092													
EEC	unknown	**1**	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 7911004092		**1**	-	-	-	-	-	-	-	-	-	-	1
80466801													
FUEL LINE	unknown	**1**	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 80466801		**1**	-	-	-	-	-	-	-	-	-	-	1
804710													
ALTIMETER	FALCON50MYST	**1**	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # 804710		**1**	-	-	-	-	-	-	-	-	-	-	1
MS244624													
BEARING	180K	**1**	-	-	-	1	-	-	-	-	-	-	-
	208B	**1**	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # MS244624		**2**	-	-	-	1	-	-	-	-	-	-	1

PART NUMBER / PART NAME	ACFT MODEL	TOTAL	YEAR 1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MS956508													
BOLT	65A90	**1**	-	-	-	-	-	-	-	-	-	-	1
TOTAL of # MS956508 - - - - - - - - - - - - - - - - -		**1**	-	-	-	-	-	-	-	-	-	-	1
TOTAL for ALL (22) PART NUMBERS: - - - -		**24**	-	-	-	1	2	-	-	-	-	2	19

END OF SIGNIFICANT OCCURRENCE REPORT INDEX

DOMESTIC

SERVICE DIFFICULTY REPORT



DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - AIRCRAFT

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
3020	564CA	BEECH				ANTI ICE TUBE	BROKEN	5496	11/14/97
	BE58	B100					LT ENG INTAKE	233	97ZZZX5044
*****	LEFT ENGINE FLAME-OUT AT 7,000 FEET HOLDING AT FLYING COLD IN ICING CONDITION. INTAKE ANTI-ICE HAD BEEN ON FOR HALF AN HOUR. FOUND ONE ANTI-ICE TUBE FLARE BROKEN OFF. SUSPECT SOME LOSS OF BLEED AIR IN THIS AREA COULD HAVE ATTRIBUTED TO ICE FORMING ON INTAKE LIP AND COMING DISLODGED PRIOR TO FLAME-OUT. AIRCRAFT IS OPERATED BY CARVER AERO, INC.								
3233	500PH	BEECH				ACTUATOR	WORN		11/28/97
HEEA	BL29	200CBEECH				508202085	NLG		HEEA0012152
	NLG ACTUATOR EXCESSIVE END PLAY.								
3213	6638B	BEECH				HOUSING	FAILED	5200	10/29/97
	M2217	C23				169810000663	NLG WHEEL		97ZZZX5109
	NOSE WHEEL ASSEMBLY FAILED, DEPARTED AIRCRAFT SHORTLY AFTER TOUCH-DOWN. LANDING COMPLETED ON MAINS AND NOSE GEAR TRUSS COLLAR. INVESTIGATION REVEALED STRESS CRACKS IN PISTON SLEEVE AT ATTACH POINTS; SUSPECT CAUSED BY OVERSTEERING DURING GROUND TO WING WITH POWER TUG. SUBMITTER RECOMMENDS INSPECTING NOSE GEAR STEERING LIMIT STOP NUT SLEEVE. IF NYLON BUSHING IS DENTED, NOSE GEAR SHOULD BE DISASSEMBLED AND INSPECTED.								
5531	691DB	CESSNA				SPAR	CRACKED		11/17/97
	177RG1314	177RG				17330021	VERTICAL FIN		97ZZZX5104
*****	VERTICAL FIN SPAR CRACKED ON BOTH SIDES RIGHT BEHIND TOP RUDDER HINGE. CRACKS MEASURE CLOSE TO .75 INCH ON BOTH SIDES. VERTICAL FIN NOT DISTORTED AND RUDDER HINGE SHOWS NO DAMAGE. CAUSE OF CRACKS UNKNOWN.								
2720	995RA	CESSNA				ROD END	FAILED	3084	11/11/97
	U20604252	U206G				12606311	RUDDER BAR		97ZZZX5111
*****	DURING PRE-FLIGHT INSPECTION, EXCESSIVE FREE MOVEMENT IN RUDDER WAS NOTED. FURTHER INVESTIGATION REVEALED THE ROD END BETWEEN THE RUDDER BAR AND BUNGEE HAD CRACKED OFF. THE PART SHOWED EVIDENCE OF HAVING BEEN CRACKED FOR A WHILE. THIS PART SEEMS TO BE VERY SMALL FOR THE STRESS IT COMES UNDER. SUBMITTER RECOMMENDS TOUGHER MATERIAL OR INCREASED SIZE. THIS IS THE FOURTH BROKEN ROD END SUBMITTER HAS FOUND ON U206 SERIES AIRCRAFT.								
5751	738FX	CESSNA				BEARING	FROZEN	996	10/31/97
	208B0482	208B				MS244624	LT AIL OB HINGE		97ZZZX5039
*****	DURING INSPECTION, AILERON CONTROL WAS DISCOVERED TO HAVE UNUSUALLY HIGH RESISTANCE. RESISTANCE WAS EVENTUALLY ISOLATED TO THE LEFT AILERON. BOTH BEARINGS WERE REPLACED AND THE OUTBOARD BEARING WAS FOUND ALMOST FROZEN WITH CORROSION. THESE ARE SEALED BEARINGS AND HAD NO OUTWARD SIGNS TO INDICATE A PROBLEM. NO REASON FOR THE CORROSION WAS NOTED.								
5520	2656B	CESSNA				FITTING	CRACKED	4500	11/20/97
WIWR	421C0711	421C				50350053	LT ELEVATOR		97ZZZX5106
	DURING A 100-HOUR INSPECTION, THE END FITTING ON THE LT ELEVATOR WAS FOUND CRACKED AT THE HOLE FOR THE TAPERED PIN. IT APPEARS THE END FITTING HAD BEEN REMOVED FROM THE AIRCRAFT BEFORE. SUBMITTER STATED THE USE OF PROPER TORQUE WHEN INSTALLING THE TAPERED PINS WOULD PREVENT CRACKS AT THE PIN HOLE FROM OCCURRING.								
5210	2FOR	CESSNA				HINGE	CRACKED	4946	10/13/97
WTXR	4410067	441				511151515	CABIN DOOR		97ZZZX5045
	WHILE AIRCRAFT WAS UNDERGOING A SCHEDULED INSPECTION, NOTED THE RIVETS IN THE THE AFT LOWER CABIN DOOR HINGE APPEARED TO BE LOOSE. FURTHER VISUAL AND EDDY CURRENT INSPECTION SHOWED THE HINGE WAS CRACKED AT ALL THREE RIVET LOCATIONS. THE RIVETS HAD BEEN INSTALLED PREVIOUSLY IAW CESSNA BULLETIN PJN81-21. HINGE WAS REMOVED AND NEW PART INSTALLED.								
2750	45NS	CESSNA				GEARBOX	SEIZED		11/12/97
MOGA	5500479	550				556517531	RT FLAP	2825	97ZZZX5035
	AFTER TAKEOFF FOR FLIGHT TO ORLANDO, FLAPS SELECTED UP. HEARD BANG AND FLAP CIRCUIT BREAKER TRIPPED. RESET CIRCUIT BREAKER, FLAPS DID NOT MOVE AND CIRCUIT BREAKER TRIPPED AGAIN. FLIGHT CONTINUED TO DESTINATION AT REDUCED SPEED AND MADE UNEVENTFUL LANDING. TROUBLESHOOTING REVEALED RIGHT GEARBOX HAD SEIZED. THIS CAUSED LEFT FLAP GEARBOX TO SHEAR ITS DRIVESHAFT. BOTH GEARBOXES WERE REPLACED BY UPDATED DASH 38 UNITS IAW CESSNA SB 550-27-16, REV 1.								

******* DENOTES SIGNIFICANT OCCURRENCE**

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
2750	45NS	CESSNA				GEARBOX	SHEARED		11/12/97
	5500479	550				556517531	LT FLAP	975	97ZZZX5032
	WHILE TROUBLEHSHOOTING FLAP DRIVE FAILURE, FOUND LEFT FLAP GEARBOX DRIVESHAFT SHEARED. THIS WAS CAUSED BY RIGHT FLAP GEARBOX SEIZING. REPLACED GEARBOX WITH UPGRADED DASH 38 UNIT iAW CESSNA SB 558-27-16, REV 7.								
7160	29076	CHRIS				AIR BOX	WORN	490	11/12/97
	1022	A1				35453	VALVE SHAFT		97ZZZX5038
*****	AIR INTAKE BOX SHAFT, ARM AND SLEEVE BUSHINGS FOUND BADLY WORN. APPEARS TO BE CAUSED BY ENGINE VIBRATION EVEN THOUGH PROPELLER WAS BALANCED AT 532.5 HRS TO .013 IPS. BOX BY DESIGN IS NOT REPAIRABLE DUE TO SHAFT WELDED TO PLATE. SUBMITTER RECOMMENDED BOX BE RE-DESIGNED BY MFG TO INCORPORATE SEALED BALL OR NEEDLE BEARINGS AND PLATE BE ATTACHED TO SHAFT USING MACHINE SCREWS AND NUTS ALLOWING FOR FIELD REPAIRS OF BOX ASSY.								
7922	454MA	MTSBSI				BYPASS VALVE	FAILED	335	9/22/97
R7MA	1535SA	MU2B60				016A4702221	TEMP REGULATOR		97ZZZX5067
	BYPASS VALVE UNIT INOPERATIVE. OIL TEMPERATURE REDLINES ON GROUND. REPLACED WITH NEW UNIT, CORRECTED PROBLEM.								
7714	737	PARTEN				TACH GENERATOR	FAILED		11/19/97
RF1R	40004OTC	P68TCOBS				TG010005006	ENGINE		97ZZZX5108
	TACHOMETER GENERATOR FAILED. HIGH TIME ON PART. SUSPECT NOT ENOUGH LUBRICATION FOR TIME ON PART. SUBMITTER STATED CHANGE AT PROPER LIFE LIMIT.								
3710	4240T	PIPER				PUMP	FAILED		11/24/97
	287205112	PA28180				211CC	VACUUM SYSTEM	1	97ZZZX5103
	PUMP FAILED ON FIRST TAKEOFF. VACUUM PUMP NEWLY OVERHAULED.								
5530	272HJ	PIPER				HINGE	SEIZED	3572	11/25/97
	317712055	PA31310				4805500	VERT STABILIZER		97ZZZX5100
	FOUND THE RUDDER TOP HINGE BOLT SEIZED IN THE HINGE BEARING AND COULD NOT BE FREED. BOTH HINGE ASSEMBLIES (THE RUDDER AND VERTICAL STABILIZER) HAD TO BE REPLACED. THE CORROSION WAS SEVERE AND THERE WAS NO EVIDENCE OF LUBRICATION.								
5540	272HJ	PIPER				HINGE	SEIZED	3572	11/25/97
	317712055	PA31310				51108004	RUDDER		97ZZZX5099
*****	FOUND THE RUDDER TOP HINGE BOLT SEIZED IN THE HINGE BEARING AND COULD NOT BE FREED. BOTH HINGE ASSEMBLIES (THE RUDDER AND VERTICAL STABILIZER) HAD TO BE REPLACED. THE CORROSION WAS SEVERE AND THERE WAS NO EVIDENCE OF LUBRICATION.								
3230	311AC	PIPER				BRACKET	CRACKED	3700	11/26/97
	31T8120016	PA31T					MLG UPLOCK		97ZZZX5041
*****	MAIN LANDING GEAR UPLOCK SUPPORT BRACKET CRACKED ALLOWING UPLOCK HOOK TO LOCK SIDEWAYS LODGING BETWEEN ROLLER AND GEAR LEG. LEFT MAIN GEAR WOULD NOT EXTEND UNTIL AIRCRAFT WAS PUT THROUGH NEGATIVE GRAVITY. SECOND AIRCRAFT FOUND WITH THIS PROBLEM.								
2913	84KA	PIPER				PUMP	FAILED	3488	8/1/97
	32R8129052	PA32R301T				38998005	HYDRAULICS		97ZZZX5110
	ELECTRO HYDRAULIC PUMP RUNS, BUT PRODUCED INSUFFICIENT HYDRAULIC PRESSURE TO MOVE GEAR PAST HALF RETRACT POSITION. FOUND FLUID LEVEL FULL. NO EXTERNAL LEAKS. PUMP SENT TO PIPER FOR REPAIR, BUT THEY LOST UNIT SOMEPLACE, SO WAS UNABLE TO FIND OUT WHAT WAS WRONG. INSTALLED NEW PUMP IN AIRCRAFT.								
5743	19SW	PIPER				TRUNNION BRACKET	LOOSENED	7650	11/13/97
	347250119	PA34200				67041	MLG MOUNT		97ZZZX5042
*****	INSPECTION FOUND THE MLG TRUNNION MOUNTING BOLTS LOOSE ON THEIR BRACKETS. THIS LOOSENING CAUSES THE HOLES IN THE WING SPAR TO ELONGATE. SUBMITTER STATED THEY HAVE FOUND THE BOLTS LOOSE REGULARLY ON ALL OF FLEET PA28R AND PA34 AIRCRAFT.								

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
7603	9091J	PIPER				CABLE ASSY	PARTED	3446	9/11/97
S88R	425501035	PA42720				5697905	NR 1 THROTTLE		97ZZZX5112

***** DURING PRE-FLIGHT OPERATIONAL CHECKS, THE LEFT ENGINE THROTTLE CABLE STAINLESS STEEL RIBBON CORE PARTED WHERE THE CABLE PASSES THROUGH A CUT-OUT IN THE AILERON BELLCRANK RT MOUNTING BRACKET. ENGINE CONTROL WAS LOST AND THE MISSION ABORTED. INVESTIGATION REVEALED THE CABLE INSTALLATION VIOLATED THE 7 INCH MINIMUM BEND RADIUS AT THE POINT OF PARTING. THE CUT-OUT AREA IN THE BRACKET WAS SUBSEQUENTLY ENLARGED TO RELIEVE THE CABLE BEND. THE CABLE ASSEMBLY WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE.

(End of DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - AIRCRAFT)

DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - HELICOPTERS

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
8500	7234Y	AMTR	ROTAX			ENGINE	FAILED		10/26/97
	231	MINI500	ROTAX582				POWER SECTION		97ZZZX5105
	DURING PATTERN WORK, ENGINE FAILED AT ABOUT 500 FEET AFTER TAKEOFF. HELICOPTER WAS DESTROYED. REASON FOR ENGINE FAILURE NOT GIVEN.								
2430	40LP	BELL				RELAY	INTERMITTENT	708	9/26/97
ZV1R	45233	206L1				SM20ACD200A21	DC SYSTEM		97ZZZX4975
	INTERMITTENT OPERATION.								
2436	3178K	BELL				VOLT REGULATOR	FAILED		11/28/97
HEEA	45765	206L1				206075447007	DC SYS		HEEA0012144
	VOLT REG WILL NOT STAY ON LINE.								
2562	8589X	BELL			NARCO	ELT	DEFECTIVE		11/28/97
HEEA	51487	206L3				ELT910	COCKPIT		HEEA0012146
	ELT SEAL MISSING.								
3212	5019G	BELL				FLOAT	MALFUNCTIONED		11/20/97
HEEA	45247	206L1					SKIDS		97ZZZX5037
	IN CRUISE FLIGHT, FLOATS INADVERTENTLY INFLATED. NOTE: IT WAS REPORTED THAT FLOAT POWER WAS NOT ARMED AT THE TIME. RETURNED TO BASE AND LANDED WITHOUT INCIDENT. NO CAUSE FOUND FOR INADVERTENT FLOAT INFLATION.								
3414		BELL				INDICATOR	LEAKAGE		11/28/97
HEEA		206L1				8000	AIR SPEED		HEEA0012143
	AIR SPEED INDICATOR EXCESSIVE CASE LEAKAGE.								
3421	206BY	BELL				INDICATOR	FAILED	454	11/18/97
	2871	206B3				500DCF	HORIZON REF		97ZZZX5077
	HORIZON REFERENCE INDICATOR WILL NOT CAGE.								
3452	2251A	BELL				TRANSPONDER	FAILED		11/28/97
HEEA	45755	206L1			KT76	066106200	COCKPIT		HEEA0012159
	TRANSPONDER NO TEST LIGHT AND NO POWER. PERFORMED PRELIMINARY INSPECTION AND FOUND REPLY LIGHT DIM, REPLACED V301 PHOTOCELL. REPAIRED. BENCH CHECK GOOD.								
5521		BELL				SPAR	MIS MFG		11/28/97
HEEA		206L1				206023119159	RT ELEV		HEEA0012129
	R/H ELEVATOR SPAR IS TOO SHORT. IT IS 5 1/16" LONG AND SHOULD BE 5 3/4" LONG.								
5610	5007Q	BELL				WINDSHIELD	MIS MFG		11/28/97
HEEA	45187	206L1				M2063401	COCKPIT LT		HEEA0012130
	INBOARD SIDE OF WINDSHIELD TOO SHORT 3/4".								
6114		BELL		MCAULY		HUB	CRACKED	1187	6/1/96
		206B		E2A34C73		D5347C73	PROPELLER		EY2R9600073
	HUB ASSY CRACKED								

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
6240	5012V	BELL				INDICATOR	INOPERATIVE		11/28/97
HEEA	45200	206L1				206070265101	DUAL TACH		HEEA0012147
	NR NEEDLE INOPERATIVE.								
6710	2772A	BELL				ACTUATOR	DEFECTIVE		11/28/97
HEEA	45311	206L1				206062721109	M/R		HEEA0012140
	DROOP COMP DEFECT, UNABLE TO ADJUST SPREAD TO 3%. GOV WAS CHANGED AT THE SAME TIME WITH RATCHETING ARM.								
7250	2138Y	BELL	ALLSN			TURBINE	COKED	13208	10/21/97
	45639	206L1	250C28B			23033185	SCAV OIL PORT	785	97ZZZX4973
*****	FIVE MINUTES AFTER TAKEOFF, PILOT NOTICED OIL PRESSURE GAUGE FLUCTUATED FROM 60 PSI - 130 PSI AT A STEADY RATE. DURING A PRECAUTIONARY LANDING, THE TORQUE FLUCTUATED ABOUT 10 PERCENT. UPON INITIAL INVESTIGATION, THE OIL RESERVOIR WAS WAY DOWN AND THE EXHAUST COLLECTOR WAS VERY WET WITH OIL. SPECULATION - NR 6 AND NR 7 SCAVENGE STRUT BECAME PLUGGED AND THE PUMP FORCED OIL THROUGH SEAL INTO THE TURBINE AND PUMPED IT OVERBOARD. TURBINE ASSEMBLY WAS CHANGED.								
7714	3904L	BELL				GAGE	STUCK		11/28/97
HEEA	45597	206L1				206075682001	GAS PROD		HEEA0012142
	GAS PROD GAGE NEEDLES STICK AT ZERO AT ANY SETTING.								
7930	5019G	BELL				INDICATOR	DEFECTIVE		11/28/97
HEEA	45247	206L1			174000103	174035201	ENG OIL		HEEA0012137
	INDICATOR WAS REMOVED FROM BOWL AND CLEANED. INSTALLED INDICATOR BACK ON BOWL, TESTED AND INDICATOR STILL DIDN'T WORK.								
7930	10761	BELL				INDICATOR	FAILED		11/28/97
HEEA	45381	206L1			174000103	174035201	ENG OIL		HEEA0012136
	INDICATOR WAS REMOVED FROM BOWL AND CLEANED. INSTALLED INDICATOR BACK ON BOWL, TESTED AND INDICATOR STILL DIDN'T WORK. (BYPASS INOPERATIVE)								
7930	2249Z	BELL				INDICATOR	DEFECTIVE		11/28/97
HEEA	45753	206L1			174000103	174035201	ENG OIL		HEEA0012138
	INDICATOR WAS REMOVED FROM BOWL AND CLEANED. INSTALLED INDICATOR BACK ON BOWL, TESTED AND INDICATOR STILL DIDN'T WORK.								
2432	8045T	BELL				CHARGER	FAILED		11/28/97
HEEA	28101	214ST				214175379103	BATTERY		HEEA0012153
	BATTERY WILL NOT STAY CHARGED.								
2435	5748M	BELL				GENERATOR	FAILED		11/28/97
HEEA	28102	214ST				214175150105	DC SYS		HEEA0012154
	GENERATOR INOPERATIVE.								
2435	6957Y	BELL				STARTER	FAILED	1695	11/28/97
HEEA	28139	214ST				214060056103	ENGINE		HEEA0012132
	STARTER FALLS OFF LINE AT 20-30%.								
3421	4UV	BELL				GYRO	FAILED		10/13/97
TI1R	23019	230			KBV350	060002600	COCKPIT VG		97ZZZX5051
	GYRO WILL NOT SPOOL UP COMPLETELY. REMOVED AND REPLACED.								
3421	4UV	BELL				GYRO	FAILED		10/17/97
TI1R	23019	230				060002600	COCKPIT VG		97ZZZX5053
	GYRO SLOW TO TURN UP. REMOVED AND REPLACED.								

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
6220	230UN	BELL				BEARING	CORRODED		11/28/97
HEEA	23009	230				222310460103	M/R		HEEA0012162
	BEARING HAS CORROSION AND PITTING INSIDE OF BOLT HOLES. SERIAL NUMBERS REMOVED ARE RX1312 AND RX1293.								
6330	230UN	BELL				BEARING LINER	BROKEN		11/28/97
HEEA	23009	230				222010548105	XMSN MOUNT		HEEA0012164
	BEARING LINER IS BROKEN.								
2140	407MM	BELL				SHUTOFF VALVE	FAILED	770	11/28/97
HEEA	53060	407				47127	HEATER SYS		HEEA0012160
	HEATER SYSTEM WOULD NOT COME ON.								
3452	417PH	BELL				TRANSPONDER	INOPERATIVE		11/28/97
HEEA	53038	407			KT76	066106200	COCKPIT		HEEA0012158
	TRANSPONDER INOPERATIVE. FOUND UNIT TO HAVE LOW POWER OUT. REPLACED WEAK V101 CAVITY OSCILLATOR. REPAIRED. ADJUSTED AS NEEDED. BENCH CHECK GOOD.								
6300	437PH	BELL				LINK	WORN		11/28/97
HEEA	53072	407				406312103101	M/R DRIVE		HEEA0012165
	FOUND LINK BEARINGS WORN. SERIAL NUMBERS REMOVED ARE NHFS-2945 AND NHFS-2931.								
6321	457PH	BELL				PUCK	UNBONDED	221	11/28/97
HEEA	53147	407				206340301103	ROTOR BRAKE		HEEA0012163
	ROTOR BRAKE PUCK CAME UNBONDED.								
6340	57416	BELL				TRANSMITTER	FAILED	1103	11/28/97
HEEA	53070	407				222375077109	M/R TORQUE		HEEA0012161
	TORQUE INDICATOR ERRATIC.								
6410	417PH	BELL				BLADE	WORN	995	12/2/97
HEEA	53038	407				407012101105	T/R		HEEA0012170
	TAIL ROTOR BLADE BEARING WORN. PARTS AND LABOR WILL BE INVOICED...WO#9700658-99.								
6500	407PH	BELL				BEARING	ROUGH		12/1/97
HEEA	53003	407			407040320101	406040339105	T/R DRIVE		HEEA0012168
	ROUGH BEARING. SERIAL NUMBERS REMOVED ARE C97-1859 AND C97-1844. SCRAPPED BEARINGS.								
6500	141MA	BELL				BEARING	ROUGH		12/1/97
HEEA	53016	407			407040320101	406040339105	T/R DRIVE		HEEA0012169
	ROUGH BEARING. SERIAL NUMBERS REMOVED ARE C97-1888 AND K96-2112. SCRAPPED BEARINGS.								
6500	447PH	BELL				BEARING	ROUGH		12/1/97
HEEA	53114	407			406040320101	406040339105	T/R DRIVE		HEEA0012166
	ROUGH BEARING. SERIAL NUMBERS REMOVED ARE K96-0116 AND K96-0134.								
6510	417AL	BELL				DISK	CRACKED		9/24/97
ALGR	53054	407				406040340101	T/R DISK PACK		97ZZZX4979
	SCHEDULED INSPECTION FOUND DISK PACK DISK CRACKED. REMOVED AND REPLACED. THREE REPORTS RECEIVED DATED 9-24-97 ON T/R DISK PACK DISK CRACKED.								

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
6510	417AL	BELL				DISK	CRACKED		9/24/97
ALGR	53054	407				406040340101	T/R DISK PACK		97ZZZX4978
	SCHEDULED INSPECTION FOUND DISK PACK DISK CRACKED. THREE REPORTS RECEIVED DATED 9-24-97 ON T/R DISK PACK DISK CRACKED.								
7261	407MM	BELL	ALLSN			FILTER ELEMENT	TRIPPED		11/28/97
HEEA	53060	407	250C47B			23063144	OIL BY PASS		HEEA0012128
	ENGINE EXTERNAL OIL FILTER BYPASS BUTTON POPPED. REPLACED WITH SERVICEABLE FILTER.								
2160	3893S	BELL				CONTROL	FAILED		11/28/97
HEEA	33022	412				212073927001	TEMP CONTROL		HEEA0012139
	TEMPERATURE CONTROL INOPERATIVE.								
2312	2149S	BELL				CONTROL UNIT	FAILED		11/28/97
HEEA	36002	412				071121525	COCKPIT		HEEA0012157
	CONTROL DISPLAY STAYS DIM. PERFORMED PRELIMINARY INSPECTION AND REPLACED V101 PHOTOCELL AND PHOTOCELL LENS, REPAIRED, TESTED, CHECKED 28V LIGHTING. BENCH CHECK GOOD.								
2822	141PH	BELL				PUMP	FAILED		11/28/97
HEEA	33197	412				164A1681	FUEL BOOST		HEEA0012145
	BOOT PUMP NOISY AND PRESSURE FLUCTUATIONS.								
5260	3893N	BELL				ACTUATOR	FAILED		11/25/97
HEEA	33010	412				212075418105	STEP		HEEA0012124
	STEP ACTUATOR INOPERATIVE. WILL NOT RETRACT.								
5260	107X	BELL				ACTUATOR	FAILED		11/24/97
HEEA	33113	412				212075418105	STEP		HEEA0012122
	STEP ACTUATOR WILL NOT ACTUATE.								
5260	108X	BELL				ACTUATOR	FAILED		11/24/97
HEEA	33115	412				212075418105	STEP		HEEA0012121
	STEP ACTUATOR WILL NOT OPERATE AT ALL.								
7810	3911L	BELL				DUCT ASSY	CRACKED		11/24/97
HEEA	33023	412				212061202009	LT EXH		HEEA0012123
	EXH DUCT CRACKED/MISMANUFACTURED.								
6510		BOEING				ADAPTER	MISALIGNED		11/19/97
CHIR		1072				107D33421	DRIVE SHAFT		CHI1957
	NEW PART RECEIVED AND ADAPTER HOLES MISALIGNED. (X)								
2312	911PF	BOLKMS				TRANSCEIVER	WEAK		11/28/97
HEEA	S718	BO105S			RT40	40001278500	COCKPIT		HEEA0012126
	TRANSCEIVER -30DB WEAK RECEIVER SENSITIVITY AT TURN ON. REPLACED WITH SERVICEABLE PART.								
2844	105NC	BOLKMS				TRANSMITTER	MALFUNCTIONED	478	5/28/97
R7MA	790	BO105CBS				DK042	FUEL PRESSURE		97ZZZX5057
	FUEL PRESSURE UNIT CAUSES PRESSURE GAUGE TO FLUCTUATE. REPLACED WITH NEW UNIT, CORRECTED PROBLEM.								

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
2844	203LF	BOLKMS				TRANSMITTER	FAILED	505	11/2/97
R7MA	2015	BO105LSA3				DK042	FUEL PRESSURE		97ZZZX5062
	TRANSMITTER UNIT INOPERATIVE. LOW PRESSURE READINGS. REPLACED WITH NEW UNIT, CORRECTED PROBLEM.								
2844	91070	BOLKMS				TRANSDUCER	FAILED		11/28/97
HEEA	S145	BO105S				BSE206150G3	FUEL PRESS		HEEA0012149
	TRANSDUCER TRANSMITS OUT OF TOLERANCE THROUGHOUT SCALE.								
2844	91070	BOLKMS				TRANSDUCER	SHORTED		11/28/97
HEEA	S145	BO105S				BSE20660G1	FUEL PRESS		HEEA0012150
	TRANSDUCER INTERNALLY SHORTED.								
2844	91070	BOLKMS				TRANSDUCER	FAILED		11/28/97
HEEA	S145	BO105S				BSE206150G3	FUEL PRESS		HEEA0012148
	TRANSDUCER INTERNALLY SHORTED.								
2844	485EC	BOLKMS				TRANSMITTER	ERRATIC	295	10/24/97
R7MA	S754	BO105S				DK042	FUEL PRESSURE		97ZZZX5068
	PRESSURE TRANSMITTER ERRATIC. REPLACED WITH NEW UNIT, CORRECTED PROBLEM.								
6320	202LF	BOLKMS				SWITCH	FAILED	209	7/20/97
R7MA	2014	BO105LSA3				6607A2114	OIL PRESSURE		97ZZZX5060
	TRANSMISSION LIGHT ILLUMINATES DURING FLIGHT. REPLACED WITH NEW UNIT, CORRECTED PROBLEM.								
6320	202LF	BOLKMS				SWITCH	FAILED	274	8/27/97
R7MA	2014	BO105LSA3				6607A2114	OIL PRESSURE		97ZZZX5059
	TRANSMISSION OIL PRESSURE LIGHT ILLUMINATES DURING FLIGHT. REPLACED WITH NEW UNIT, CORRECTED PROBLEM.								
6320	203LF	BOLKMS				SWITCH	FAILED	376	7/20/97
R7MA	2015	BO105LSA3				6607A2114	OIL PRESSURE		97ZZZX5063
	WARNING SWITCH UNIT INOPERATIVE. OIL PRESSURE WARNING LIGHT WILL NOT TURN OFF. REPLACED WITH NEW UNIT, CORRECTED PROBLEM.								
7120	203LF	BOLKMS				BUSHING	WORN	283	9/17/97
R7MA	2015	BO105LSA3				10560387	MOUNT		97ZZZX5064
	BUSHING ELASTOMERICS WORN BEYOND SERVICEABLE LIMITS. REPLACED WITH NEW UNIT, CORRECTED PROBLEM.								
7170	203LF	BOLKMS				DRAIN VALVE	LEAKING	330	11/5/97
R7MA	2015	BO105LSA3				P101228X	ENGINE		97ZZZX5061
	DRAIN VALVE LEAKING BEYOND SERVICEABLE LIMITS. REPLACED WITH NEW UNIT, CORRECTED PROBLEM.								
7210	105LC	BOLKMS	ALLSN			GEARBOX	BROKEN	4962	11/12/97
	S789	BO105S	250C20			6894171	MOUNT		97ZZZX5078
	ENGINE HAD GEARBOX THAT HAD UPPER LEFT COMPRESSOR MOUNT BROKEN OFF. FOUND NO REASON FOR BREAKAGE.								
7313	135AE	BOLKMS	ALLSN			NOZZLE	CRACKED	393	11/26/97
HEEA	S838	BO105S	250C20B		6898735	23060450	TURBINE NR 1		HEEA0012125
	ENGINE REMOVED DUE TO N1 DRAG. UPON INSPECTION OF TURBINE PARTS NOTED: BURNT AND CRACKED BEYOND SERVICEABLE LIMITS ON NR1 NOZZLE VANES. INSTALLED A DALLAS AIRMOTIVE OVERHAULED NR1 NOZZLE.								

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
7323	8776	BOLKMS	ALLSN			GOVERNOR	FAILED	436	9/22/97
AC2R	S776	BO105S	250C20B			23057869	ENGINE		97ZZZX4977
	UNABLE TO ADJUST DROOP COMP. REPLACED GOVERNOR.								
7323	5366Y	BOLKMS	ALLSN			GOVERNOR	MALFUNCTIONED	1586	9/11/97
AC2R	S782	BO105S	250C20B			23057869	ENGINE		97ZZZX4976
	GOVERNOR HAS NO MORE ADJUSTMENT FOR COMPENSATION. REPLACED GOVERNOR.								
7722	911FL	BOLKMS				INDICATOR	FAILED		11/28/97
HEEA	S717	BO105S				50061036	EXH TEMP		HEEA0012131
	EGT INDICATOR HIGH OUT OF TOLERANCE. TIME SINCE REPAIR 0:00.								
7910	54197	BOLKMS				FILTER ASSY	DEFECTIVE		11/28/97
HEEA	S805	BO105S				174000105	SCREEN		HEEA0012135
	FOUND FILTER ASSY SCREEN ON OUTPUT SIDE BROKEN.								
2430	951AM	BOLKMS				TOGGLE SWITCH	FAILED		10/2/97
R7MA	7017	BK117A3				SP461310	DC SYSTEM		97ZZZX5075
	TOGGLE SWITCH UNIT INOPERATIVE. WILL NOT CLOSE WHEN POWER IS 'OFF'. UNIT IS STUCK IN 'ON' POSITION. REPLACED WITH NEW UNIT, CORRECTED PROBLEM.								
2430	17SJ	BOLKMS				TOGGLE SWITCH	INTERMITTENT	325	7/4/97
R7MA	7230	BK117B1				SP461300	DC SYSTEM		97ZZZX5058
	SWITCH UNIT OPERATES INTERMITTENTLY. ALT. PN 83990508. REPLACED WITH NEW UNIT, CORRECTED PROBLEM.								
2435	4493X	BOLKMS				STARTER/GEN	CHAFED	32	10/5/97
TI1R	S7038	BK117A3				23032022	ENGINE		97ZZZX5054
	REMOVED NR 2 STARTER/GENERATOR. FAN CHAFED HOLE IN SCREEN. REMOVED AND REPLACED.								
3244	527MB	BOLKMS				INDICATOR	FAILED	4	10/16/97
TI1R	7103	BK117A3				5090004910	TURN/BANK		97ZZZX5055
	CIRCUIT BREAKER TRIPS. INDICATOR HAS INTERNAL SHORT. REMOVED AND REPLACED.								
3310	911VU	BOLKMS				RESISTOR	FAILED	983	9/6/97
R7MA	7141	BK117B1				RV2NBYSD103B	COCKPIT		97ZZZX5074
	VARIABLE RESISTOR CAUSES CIRCUIT BREAKERS TO TRIP. REPLACED WITH NEW UNIT, CORRECTED PROBLEM.								
3340	136AE	BOLKMS				POWER SUPPLY	FAILED		11/28/97
HEEA	7234	BK117B2				SPL2501024	STROBE		HEEA0012141
	NO 24 VOLT OUTPUT.								
3421	911MZ	BOLKMS				INDICATOR	DEFECTIVE		10/19/97
TI1R	7098	BK117A3				4021541671	HORIZON		97ZZZX5056
	BAD INPUTS TO YAW CSAS. NOTE: RED IMPACT INDICATOR. REMOVED AND REPLACED.								
6320	911VU	BOLKMS				TRANSMITTER	FAILED	694	7/17/97
R7MA	7141	BK117B1				IPT20RT1100080G	M/R TRANSMISSION		97ZZZX5073
	TRANSMITTER UNIT CAUSES OIL PRESSURE GAUGE NEEDLE TO FLUCTUATE. REPLACED WITH NEW UNIT, CORRECTED PROBLEM.								

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
6520		BOLKMS				BEARING	MISMANUFACTURED		10/8/97
TI1R		BK117A3				4639311003	T/R GEARBOX		97ZZZX5080
	TOLERANCES TOO TIGHT, WOULD NOT FIT ON SHAFT CORRECTLY. REMOVED AND REPLACED.								
7712	117NG	BOLKMS				PRESSURE XDUCER	FAILED		9/26/97
TI1R	7083	BK117A4				G555674	ENGINE TORQUE		97ZZZX5047
	TORQUE STARTED FLUCTUATING THEN TOTAL FAILURE. REMOVED AND REPLACED.								
7712	117NG	BOLKMS				TRANSDUCER	FAILED		10/12/97
TI1R	7083	BK117A4				G555674	ENGINE TORQUE		97ZZZX5046
	TORQUE INDICATOR BEGAN TO SPIN THEN FROZE BELOW ZERO. REMOVED AND REPLACED.								
7712	586BH	BOLKMS				TRANSDUCER	FAILED	185	7/23/97
R7MA	7129	BK117A4				G555674	TORQUE		97ZZZX5069
	TORQUE TRANSDUCER UNIT OPERATES INTERMITTENTLY. REPLACED WITH NEW UNIT, CORRECTED PROBLEM.								
7712	586BH	BOLKMS				INDICATOR	STICKS	260	10/11/97
R7MA	7129	BK117A4				117940691	ENG TORQUE		97ZZZX5070
	TORQUE INDICATOR'S NR 1 NEEDLE STICKS OR BECOMES ERRATIC. REPLACED WITH NEW UNIT, CORRECTED PROBLEM. REPLACED WITH REPAIRED UNIT SN 190.								
7712	7060G	BOLKMS				TRANSDUCER	MALFUNCTIONED	645	5/15/97
R7MA	7173	BK117B1				G555674	TORQUE		97ZZZX5071
	TORQUE TRANSDUCER UNIT CAUSES PRESSURE GAUGE TO FLUCTUATE 10 PERCENT. REPLACED WITH NEW UNIT, CORRECTED PROBLEM.								
7714	424MB	BOLKMS				SPEED PICKUP	FAILED		7/10/97
R7MA	7082	BK117A3				430135601	ENGINE		97ZZZX5065
	SPEED PICKUP UNIT FAILED TO TEST UPON INSTALLATION. REPLACED WITH NEW UNIT, CORRECTED PROBLEM.								
7931	7060G	BOLKMS				TRANSDUCER	FAILED	191	7/24/97
R7MA	7173	BK117B1				IPT70RT11000250G	ENG OIL PRESS		97ZZZX5072
	TRANSDUCER UNIT CAUSES PRESSURE GAUGE TO FLUCTUATE. REPLACED WITH NEW UNIT.								
8010	428MB	BOLKMS				SWITCH	FAILED	14	8/6/97
R7MA	7088	BK117A3				151PS01A6A	ENGINE START		97ZZZX5066
	SWITCH UNIT OPERATES INTERMITTENTLY IN 'ON' POSITION. REPLACED WITH NEW UNIT, CORRECTED PROBLEM.								
2121	317MC	BOLKMS				FAN	INTERMITTENT		10/10/97
TI1R	7505	BK117C1				19A2772	AIR DIST		97ZZZX5049
	FAN INTERMITTENT. REMOVED AND REPLACED.								
6710	317MC	BOLKMS				ROD END	CORRODED		5/1/97
TI1R	7505	BK117C1				10513141	M/R		97ZZZX5050
	ROD END REJECTED DUE TO CORROSION. REMOVED AND REPLACED.								
6710	317MC	BOLKMS				ROD END	CORRODED		5/1/97
TI1R	7505	BK117C1				10513142	M/R		97ZZZX5048
	ROD END REJECTED DUE TO CORROSION. REMOVED AND REPLACED.								

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
7421	317MC	BOLKMS	LYC			IGNITER	WORN		10/16/97
TI1R	7505	BK117C1	LTS101650B1			9550166670	ENGINE		97ZZZX5052
	IGNITER PLUG WORN DOWN. REMOVED AND REPLACED.								
3422	102LU	HUGHES				GYRO	FAILED		11/28/97
HEEA	S1548	269C			KG102A	060001500	COCKPIT		HEEA0012151
	GYRO POINTS OFF COURSE.								
7400	1097J	HUGHES				EPO ASSEMBLY	FAILED		11/25/97
	9000801D	369D				369A45143	ENG REIGNITION	439	97ZZZX5076
	DEFECT IN EPO ASSEMBLY CAUSED ENGINE OUT AND AUTO RE-LITE TO COME ON SENDING THE EPO ASSEMBLY IN FOR REPAIR AND/OR AN OVERHAUL.								
3340	523FB	HUGHES			WHELEN	LENS	CRACKED	18	11/12/97
	LN003	500N				A402R	AFT STROBE		97ZZZX4974
	LENS CRACKED ALONG SEAM. FOUND ON PRE-FLIGHT.								
3422	792CH	SKRSKY				GYRO COMPASS	FAILED		11/28/97
HEEA	760193	S76A				258719342	COCKPIT		HEEA0012156
	GYRO COMPASS WANDERING INTERMITTENTLY.								
6210	4253S	SKRSKY				BLADE	SEPARATION	6173	11/28/97
HEEA	760035	S76A				7615009100052A	M/R		HEEA0012134
	BLADE SEPARATION ON THE TRIM TAB WHICH IS BEYOND LIMITS.								
6210	4253S	SKRSKY				BLADE	SEPARATION	11750	11/28/97
HEEA	760035	S76A				7615009000049A	M/R		HEEA0012133
	BLADE SEPARATION ON THE TITANIUM AND NICKEL ABRASION STRIP WHICH IS BEYOND LIMITS. SENT TO								
7722	1546G	SKRSKY				INDICATOR	DEFECTIVE		11/28/97
HEEA	760076	S76A				7645001076107	TURB TEMP		HEEA0012155
	TURB TEMP INDICATOR OUT OF TOLERANCE ON HIGH AND LOW SCALE.								
6420	40466	SNIAS				BEARING	WORN		11/28/97
HEEA	3004	AS350B2				350A33211905	T/R HUB		HEEA0012127
	BEARING WORN. REPLACED WITH SERVICEABLE PART.								
6520	40466	SNIAS				BEARING	SEPARATION	186	12/1/97
HEEA	3004	AS350B2			350A33211905	350A33215300	T/R		HEEA0012167
	BEARING RUBBER SEPARATION.								

(End of DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - HELICOPTERS)

DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - ENGINES

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
8500	7234Y	AMTR	ROTAX			ENGINE	FAILED		10/26/97
	231	MINI500	ROTAX582				POWER SECTION		97ZZZX5105
	DURING PATTERN WORK, ENGINE FAILED AT ABOUT 500 FEET AFTER TAKEOFF. HELICOPTER WAS DESTROYED. REASON FOR ENGINE FAILURE NOT GIVEN.								
8530	1528K	BEECH	CONT			PIN PLUG	BROKEN	1149	11/19/97
	E2453	A36	IO550B			630046	NR 2 CYL PISTON		97ZZZX5098
	ON REMOVAL OF NR 2 CYLINDER FOR LOW COMPRESSION, THE ONE-PIECE FORGED ALUMINUM PLUG IN THE CENTER OF THE WRIST PIN WAS FOUND BROKEN IN TWO, TWO INCHES FROM THE END.								
7314	1551L	BEECH	LYC		ROMEC	PUMP	LEAKING	20694	11/17/97
	P391	B60	TIO541E1A4			RG7570K4	FUEL SYSTEM	219	97ZZZX5085
	PUMP WAS SPEWING FUEL AT CASE PARTING LINE AT REGULATOR. GASKET HAD PUSHED ITS WAY OUT FROM BETWEEN HALVES. RESEALED BY REPAIR STATION. WAS TOLD THIS WAS OFTEN SEEN DUE TO THINNESS OF GASKET IF ONLY OIL OR GREASE WERE PRESENT ON MATING SURFACES WHEN ASSEMBLED. RECOMMEND NEW GASKET DESIGN.								
7250	2138Y	BELL	ALLSN			TURBINE	COKED	13208	10/21/97
	45639	206L1	250C28B			23033185	SCAV OIL PORT	785	97ZZZX4973
*****	FIVE MINUTES AFTER TAKEOFF, PILOT NOTICED OIL PRESSURE GAUGE FLUCTUATED FROM 60 PSI - 130 PSI AT A STEADY RATE. DURING A PRECAUTIONARY LANDING, THE TORQUE FLUCTUATED ABOUT 10 PERCENT. UPON INITIAL INVESTIGATION, THE OIL RESERVOIR WAS WAY DOWN AND THE EXHAUST COLLECTOR WAS VERY WET WITH OIL. SPECULATION - NR 6 AND NR 7 SCAVENGE STRUT BECAME PLUGGED AND THE PUMP FORCED OIL THROUGH SEAL INTO THE TURBINE AND PUMPED IT OVERBOARD. TURBINE ASSEMBLY WAS CHANGED.								
7261	407MM	BELL	ALLSN			FILTER ELEMENT	TRIPPED		11/28/97
HEEA	53060	407	250C47B			23063144	OIL BY PASS		HEEA0012128
	ENGINE EXTERNAL OIL FILTER BYPASS BUTTON POPPED. REPLACED WITH SERVICEABLE FILTER.								
7210	105LC	BOLKMS	ALLSN			GEARBOX	BROKEN	4962	11/12/97
	S789	BO105S	250C20			6894171	MOUNT		97ZZZX5078
	ENGINE HAD GEARBOX THAT HAD UPPER LEFT COMPRESSOR MOUNT BROKEN OFF. FOUND NO REASON FOR BREAKAGE.								
7313	135AE	BOLKMS	ALLSN			NOZZLE	CRACKED	393	11/26/97
HEEA	S838	BO105S	250C20B		6898735	23060450	TURBINE NR 1		HEEA0012125
	ENGINE REMOVED DUE TO N1 DRAG. UPON INSPECTION OF TURBINE PARTS NOTED: BURNT AND CRACKED BEYOND SERVICEABLE LIMITS ON NR1 NOZZLE VANES. INSTALLED A DALLAS AIRMOTIVE OVERHAULED NR1 NOZZLE.								
7323	8776	BOLKMS	ALLSN			GOVERNOR	FAILED	436	9/22/97
AC2R	S776	BO105S	250C20B			23057869	ENGINE		97ZZZX4977
	UNABLE TO ADJUST DROOP COMP. REPLACED GOVERNOR.								
7323	5366Y	BOLKMS	ALLSN			GOVERNOR	MALFUNCTIONED	1586	9/11/97
AC2R	S782	BO105S	250C20B			23057869	ENGINE		97ZZZX4976
	GOVERNOR HAS NO MORE ADJUSTMENT FOR COMPENSATION. REPLACED GOVERNOR.								
7421	317MC	BOLKMS	LYC			IGNITER	WORN		10/16/97
TI1R	7505	BK117C1	LTS101650B1			9550166670	ENGINE		97ZZZX5052
	IGNITER PLUG WORN DOWN. REMOVED AND REPLACED.								

******* DENOTES SIGNIFICANT OCCURRENCE**

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
8530	414YH	CESSNA	CONT			CYLINDER	CRACKED		10/14/97
DOKA	414A0514	414A	TSIO520NB			642594F	ENGINE	364	97ZZZX5107
	OIL LEAKED FROM THE CRACKED CYLINDER WHICH FLOWED ONTO THE EXHAUST SYSTEM AND CAUSED SOME SMOKE TO BE FORCED INTO THE CABIN. THE PILOT DID A PRECAUTIONARY SHUT DOWN AND LANDED AT RAPID CITY WITHOUT ANY FURTHER INCIDENT.								
8520	38938	DHAV	PWA			STUD	DEFECTIVE	98	7/8/96
	424	DHC2*	R985*				NR 1 CYLINDER		97ZZZX5036
	NR 1 CYLINDER STUD DEFECTIVE. THIS IS A COMMON PROBLEM TO THESE ENGINES. THE BASIC PROBLEM HERE IS HOW THE AD READS. SUBMITTER BELIEVES THERE IS A NEED TO REVISE THE WORDING.								

(End of DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - ENGINES)

DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - COMPONENTS

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
2562	8589X	BELL			NARCO	ELT	DEFECTIVE		11/28/97
HEEA	51487	206L3				ELT910	COCKPIT		HEEA0012146
	ELT SEAL MISSING.								
3414		BELL				INDICATOR	LEAKAGE		11/28/97
HEEA		206L1				8000	AIR SPEED		HEEA0012143
	AIR SPEED INDICATOR EXCESSIVE CASE LEAKAGE.								
3421	206BY	BELL				INDICATOR	FAILED	454	11/18/97
	2871	206B3				500DCF	HORIZON REF		97ZZZX5077
	HORIZON REFERENCE INDICATOR WILL NOT CAGE.								
3452	2251A	BELL				TRANSPONDER	FAILED		11/28/97
HEEA	45755	206L1			KT76	066106200	COCKPIT		HEEA0012159
	TRANSPONDER NO TEST LIGHT AND NO POWER. PERFORMED PRELIMINARY INSPECTION AND FOUND REPLY LIGHT DIM, REPLACED V301 PHOTOCELL. REPAIRED. BENCH CHECK GOOD.								
3421	4UV	BELL				GYRO	FAILED		10/17/97
TI1R	23019	230				060002600	COCKPIT VG		97ZZZX5053
	GYRO SLOW TO TURN UP. REMOVED AND REPLACED.								
3421	4UV	BELL				GYRO	FAILED		10/13/97
TI1R	23019	230			KBV350	060002600	COCKPIT VG		97ZZZX5051
	GYRO WILL NOT SPOOL UP COMPLETELY. REMOVED AND REPLACED.								
3452	417PH	BELL				TRANSPONDER	INOPERATIVE		11/28/97
HEEA	53038	407			KT76	066106200	COCKPIT		HEEA0012158
	TRANSPONDER INOPERATIVE. FOUND UNIT TO HAVE LOW POWER OUT. REPLACED WEAK V101 CAVITY OSCILLATOR. REPAIRED. ADJUSTED AS NEEDED. BENCH CHECK GOOD.								
2312	2149S	BELL				CONTROL UNIT	FAILED		11/28/97
HEEA	36002	412				071121525	COCKPIT		HEEA0012157
	CONTROL DISPLAY STAYS DIM. PERFORMED PRELIMINARY INSPECTION AND REPLACED V101 PHOTOCELL AND PHOTOCELL LENS, REPAIRED, TESTED, CHECKED 28V LIGHTING. BENCH CHECK GOOD.								
2312	911PF	BOLKMS				TRANSCEIVER	WEAK		11/28/97
HEEA	S718	BO105S			RT40	40001278500	COCKPIT		HEEA0012126
	TRANSCEIVER -30DB WEAK RECEIVER SENSITIVITY AT TURN ON. REPLACED WITH SERVICEABLE PART.								
3421	911MZ	BOLKMS				INDICATOR	DEFECTIVE		10/19/97
TI1R	7098	BK117A3				4021541671	HORIZON		97ZZZX5056
	BAD INPUTS TO YAW CSAS. NOTE: RED IMPACT INDICATOR. REMOVED AND REPLACED.								
3422	102LU	HUGHES				GYRO	FAILED		11/28/97
HEEA	S1548	269C			KG102A	060001500	COCKPIT		HEEA0012151
	GYRO POINTS OFF COURSE.								

******* DENOTES SIGNIFICANT OCCURRENCE**

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
2210	4082T	PIPER			KING	SWITCH	MALFUNCTIONED		11/19/97
	318152089	PA31350			KFC200	065501100	AUTOPILOT	306	97ZZZX5102
	DURING A PRE-FLIGHT CHECK, PILOT TESTED THE ACCELEROMETER SWITCH. IT WOULD TEST OK IN THE DOWN POSITION, BUT WOULD NOT TEST IN THE UP POSITION. SUBMITTER RECOMMENDS THAT THE PART BE TSO'D OUT OF THE SYSTEM.								
2210	4082T	PIPER			KING	SWITCH	FAILED	541	11/15/97
	318152089	PA31350			KFC200	065501100	AUTOPILOT		97ZZZX5101
	PILOT REPORTED UPON COMPLETION OF PRE-FLIGHT CHECK, ACCELEROMETER SWITCH WOULD NOT TEST OR DISCONNECT AUTOPILOT AS REQUIRED BY POH INSTRUCTIONS. THE SYSTEM WAS FOUND TO DISCONNECT IN THE DOWN POSITION SOMETIMES, AND WOULD NOT DISCONNECT IN THE UP POSITION. THE SWITCH IS OF VERY POOR DESIGN AND CONSTRUCTION. INNER AND OUTER HOUSINGS ARE OF DISSIMILAR METAL AND DO NOT EXPAND AND CONTRACT AT THE SAME RATE NOT ALLOWING THE SWITCH TO MOVE AT DIFFERENT TEMPS. WHOLE SYSTEM IS OVER-ENGINEERED. ONE SIMPLE TSO TO REMOVE THE SWITCH FROM THE SYSTEM WOULD CURE THE PROBLEM. IF SWITCH IS USED FOR WHAT IT WAS DESIGNED, PILOT HAS ALREADY LOST CONTROL OF THE AIRCRAFT!!								
2215	9284X	PIPER			KING	SCREWS	LOOSENED	235	11/7/97
	4636087	PA46350P			KS270A	089606705	PITCH SERVO		97ZZZX5040
*****	SERVO NOT WORKING PROPERLY. REMOVED FROM AIRCRAFT AND FOUND THREE SCREWS BACKED OUT UNTIL THEY HIT PLATE 073-0515-03. SCREWS NEED LOCTITE.								
3422	792CH	SKRSKY				GYRO COMPASS	FAILED		11/28/97
HEEA	760193	S76A				258719342	COCKPIT		HEEA0012156
	GYRO COMPASS WANDERING INTERMITTENTLY.								

(End of DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - COMPONENTS)

DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - PROPELLERS

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
6110		ADAMS		MCAULY		RETAIN RING	CRACKED		8/1/96
		A55		2AF34C55		C3112	RPOP		EY2R9600102
	PROP RETAIN RING CRACKED								
6110		BBAVIA		HARTZL		BEARING	CRACKED		12/1/96
		8GCBC		HCC2YF1		2202	PROP ASSY		EY2R9600191
	PROP ASSY BEARING CRACKED								
6110		BEECH		HARTZL		PILOT TUBE	CRACKED	2018	6/1/96
		100BEECH		HCB3TN3		18912A	PROPELLER		EY2R9600075
	PROPELLER ASSY PILOT TUBE CRACKED								
6110		BEECH		HARTZL		BULKHEAD	CRACKED	9815	10/1/96
		B100		HCB3TN3		3064	PROP ASSY	1746	EY2R9600150
	PROP ASSY CRACKED BULKHEAD								
6114		BEECH		MCAULY		HUB	CRACKED		7/1/96
		3533		2A36C23		C4239C23	PROP		EY2R9600090
	HUB CRACKED								
6114		BEECH		MCAULY		HUB	CRACKED		7/1/96
		3533		2A36C23		C4239C23	PROP		EY2R9600091
	HUB CRACKED IN THREAD AREA								
6114		BEECH		MCAULY		HUB	CRACKED		12/1/96
		35B33		2A36C23		C2835C23	NR 2 SOCKET	238	EY2R9600164
	HUB NR2 SOCKET, HAS CRACK 12" LONG								
6110		BEECH		MCAULY		NUT	CORRODED		1/1/96
		35BEECH		3A32C76		C4904	PROP ASSY		EY2R9600213
	PROP ASSY NUT IS CORRODED								
6110		BEECH		MCAULY		RETAIN BEARING	CORRODED		1/1/96
		35BEECH		3A32C76		C2987	PROP ASSY		EY2R9600212
	PROP ASSY RETAIN BEARING CORRODED								
6110		BEECH		MCAULY		ACTUATING PIN	CORRODED		1/1/96
		35BEECH		3A32C76		B4460	BLADE		EY2R9600211
	BLADE ACTUATING PIN IS CORRODED								
6110		BEECH		MCAULY		DOWEL	CORRODED		1/1/96
		35BEECH		3A32C76		A4001	PROP ASSY		EY2R9600210
	PROP ASSY DOWEL IS CORRODED								
6111		BEECH		MCAULY		BLADE	CORRODED		1/1/96
		35BEECH		3A32C76		S82NC2	PROP ASSY		EY2R9600215
	BLADE SN K103399YS IS CORRODED								

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6111		BEECH		MCAULY		BLADE	CORRODED		1/1/96
		35BEECH		3A32C76		S82NC2	PROP ASSY		EY2R9600214
	BLADE SN K103846YS IS CORRODED								
6111		BEECH		BEECH		BEARING	CRACKED		11/1/96
		D35		215*		2153192	BLADE		EY2R9600157
	BLADE BEARING RACE CRACKED								
6114		BEECH		MCAULY		HUB	CRACKED		5/1/96
		35BEECH		3A32C76		C4211C76	SOCKET		EY2R9600054
	HUB BLADE SOCKET CRACKED								
6114		BEECH		MCAULY		HUB	CRACKED		7/1/96
		V35		2A36C23		C4239C23	THREAD AREA		EY2R9600089
	HUB CRACKED IN THREAD AREA								
6114		BEECH		MCAULY		HUB	CORRODED		1/1/96
		V35		3A32C76		D6602C76	PROP ASSY		EY2R9600209
	PROP HUB ASSY IS CORRODED								
6114		BEECH		MCAULY		HUB	CRACKED		10/1/96
		V35		3A32C76		D6602C76	THREAD AREA		EY2R9600115
	HUB CRACKED IN THREAD AREA								
6114		BEECH		MCAULY		HUB	CRACKED		9/1/96
		V35A		3A32C76		D6602C76	THREAD AREA		EY2R9600107
	HUB CRACKED IN THREAD AREA								
6111		BEECH		MCAULY		NUT	CRACKED		10/1/96
		36BEECH		2A36C23		C2463	BLADE RETAIN		EY2R9600133
	BLADE RETAIN NUT CRACKED								
6114		BEECH		MCAULY		HUB	CRACKED		12/1/96
		36BEECH		2A36C23		C6447C23	BOLT SOCKETS		EY2R9600179
	HUB ASSY CRACKED IN BOLT SOCKETS								
6110		BEECH		HARTZL		FORK	CRACKED		12/1/96
		9555		PHCC3YF2		3252	PITCH CHANGE		EY2R9600173
	PROP ASSY PITCH CHANGE FORK IS CRACKED								
6114		BEECH		MCAULY		HUB	CRACKED		7/1/96
		9555		3AF32C75		D5892C75	THREAD AREA		EY2R9600093
	HUB CRACKED IN THREAD AREA								
6110		BEECH		HARTZL		PITCH CHANGE BLK	CRACKED	4833	4/1/96
		58P		PHCJ3YF2		32532	PROP ASSY	1698	EY2R9600053
	PROP ASSY HAS A PITCH CHANGE BLOCK CRACKED								

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
6110		BEECH		HARTZL		SPRING RETAINER	CRACKED		4/1/96
		58P		PHCJ3YF2		15921	PROP ASSY		EY2R9600052
	PROP ASSY HAS A CRACKED SPRING RETAINER								
6114		BEECH		MCAULY		HUB	CRACKED		7/1/96
		58		2AF34C55		C4206C55	SOCKET		EY2R9600092
	HUB CRACKED IN BOTH BLADE SOCKETS								
6110		BEECH		HARTZL		PILOT TUBE	CRACKED		10/1/96
		B90		HCB3TN3		1891	PROP ASSY		EY2R9600122
	PROP ASSY IS CRACKED . ALL 3 PILOT TUBES								
6110		BEECH		HARTZL		BEARING	CRACKED		10/1/96
		B90		HCB3TN3		1851T	PROP		EY2R9600121
	PROP ASSY BEARING CRACKED								
6114		BELL		MCAULY		HUB	CRACKED	1187	6/1/96
		206B		E2A34C73		D5347C73	PROPELLER		EY2R9600073
	HUB ASSY CRACKED								
6110		CESSNA		MCAULY		PROPELLER	CRACKED		10/1/96
		152		1A103TCM			LE BOLT HOLES		EY2R9600114
	2 CRACKS IN LEAD EDGE BOLT HOLES								
6110		CESSNA		MCAULY		PROPELLER	CORRODED		1/1/96
		152		1A103TCM			HUB ASSY		EY2R9600192
	FIXED PITCH PROP ASSY IS CORRODED								
6114		CESSNA		MCAULY		HUB	CRACKED		10/1/96
		180		2A34C*		C1579C18	THREAD AREA		EY2R9600130
	HUB CRACKED IN THREADS AREA								
6114		CESSNA		MCAULY		HUB	CRACKED		10/1/96
		180A		2A34C66		C5480C66	MT FLANGE		EY2R9600131
	HUB CRACKED IN MOUNTING FLANGE								
6114		CESSNA		MCAULY		HUB	CRACKED		10/1/96
		180G		2A36C29		C4526C29	PROP ASSY		EY2R9600135
	PROP HUB ASSY CRACKED								
6110		CESSNA		MCAULY		CYLINDER	CORRODED	2617	1/1/96
		182P		2A34C201		C5263	PROP ASSY		EY2R9600195
	PROP ASSY CYLINDER CORRODED								
6110		CESSNA		MCAULY		PISTON ROD PIN	CORRODED	2617	1/1/96
		182P		2A34C201		B3414	PROP ASSY		EY2R9600193
	PROP ASSY PISTON ROD PIN ASSY CORRODED								

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6110		CESSNA		MCAULY		SPLIT RETAINER	CORRODED	2617	1/1/96
		182P		2A34C201		C3903	PROP ASSY		EY2R9600194
	PROP ASSY SPLIT RETAINER CRACKED								
6110		CESSNA		MCAULY		RETAIN BEARING	CORRODED	2617	1/1/96
		182P		2A34C201		C5270	PROP ASSY		EY2R9600196
	PROP ASSY RETAIN BEARING CORRODED								
6110		CESSNA		MCAULY		PROPELLER	CORRODED		1/1/96
		182Q		2A34C203			PROP ASSY	158	EY2R9600199
	PROP ASSY IS CORRODED								
6111		CESSNA		MCAULY		BLADE	CRACKED		10/1/96
		182		2A36C29		S90M8	THREAD AREA		EY2R9600134
	BLADE SN A4420YS, THREAD AREA CRACKED								
6111		CESSNA		MCAULY		BLADE	CORRODED		1/1/96
		182		2A34C201		90DA8	PROP ASSY		EY2R9600198
	BLADE ASSY SN B39063 IS CORRODED								
6111		CESSNA		MCAULY		BLADE	CORRODED		1/1/96
		182		2A34C201		90DA8	PROP ASSY		EY2R9600197
	BLADE ASSY SN C78439 IS CORRODED								
6111		CESSNA		MCAULY		BLADE	CORRODED		1/1/96
		182J		2A34C66		90AT8	PROP ASSY		EY2R9600200
	BLADE ASSY SN C37703 IS CORRODED								
6114		CESSNA		MCAULY		HUB	CRACKED		12/1/96
		182		E2A34C73		C5347C73	THREAD CRACKED		EY2R9600171
	THREAD AREAS OF HUB CRACKED								
6114		CESSNA		MCAULY		HUB	CRACKED		10/1/96
		182		D2A34C58		C4716C58	PROP ASSY		EY2R9600142
	PROP ASSY HUB CRACKED								
6114		CESSNA		MCAULY		HUB	CRACKED		9/1/96
		182P		2A34C66		C5480C66	THREAD AREA		EY2R9600106
	HUB CRACKED IN THREAD AREA								
6110		CESSNA		MCAULY		NUT	CRACKED		10/1/96
		188CESSNA		D2A34C98		C4902	PROP HUB		EY2R9600145
	NUT CRACKED WITH HUB								
6111		CESSNA		MCAULY		NUT	CRACKED		5/1/96
		188CESSNA		D2A34C98		C4902	BLADE		EY2R9600063
	BLADE NUT CRACKED								

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6114		CESSNA		MCAULY		HUB	CRACKED	2666	6/1/96
		188B		D2A34C98		C4716C98	THREAD AREA	1333	EY2R9600072
	HUB CRACKED IN THREAD AREA								
6114		CESSNA		MCAULY		HUB	CRACKED		10/1/96
		188CESSNA		2A34C66		C5480C66	THREAD AREA		EY2R9600132
	HUB CRACKED IN THREADS								
6114		CESSNA		MCAULY		HUB	CRACKED		12/1/96
		188CESSNA		B2A34C205		D6608C205	THREAD AREA		EY2R9600182
	HUB ASSY CRACKED THREADS								
6114		CESSNA		MCAULY		HUB	CRACKED		10/1/96
		188CESSNA		D2A34C98		C4716C98	PROP ASSY		EY2R9600144
	RED DYE LEAK. HUB CRACKED								
6114		CESSNA		MCAULY		HUB	CRACKED		10/1/96
		188CESSNA		D2A34C58		C4716C58	NR 2 SOCKET		EY2R9600143
	HUB CRACKED IN NR2 SOCKET								
6114		CESSNA		MCAULY		HUB	CRACKED		12/1/96
		188CESSNA		B2A34C205		D6608C205	THREAD AREA		EY2R9600181
	HUB ASSY CRACKED THREADS								
6114		CESSNA		MCAULY		HUB	CRACKED		5/1/96
		188CESSNA		D2A34C98		C4716C203	NR 2 SOCKET		EY2R9600062
	HUB CRACKED IN NR2 SOCKET								
6110		CESSNA		MCAULY		NUT	CORRODED	4513	1/1/96
		U206F		3AF32C*		C4902	PROP ASSY		EY2R9600242
	PROP ASSY NUT IS CORRODED								
6110		CESSNA		MCAULY		FERRULE	CORRODED		1/1/96
		U206F		3AF32C*		C4451	PROP ASSY		EY2R9600241
	PROP ASSY FERRULE IS CORRODED								
6110		CESSNA		MCAULY		FERRULE	CORRODED	4513	1/1/96
		U206F		3AF32C*		C4451	PROP ASSY		EY2R9600240
	PROP ASSY FERRULE IS CORRODED								
6110		CESSNA		MCAULY		RETAIN BEARING	CORRODED	4513	1/1/96
		U206F		3AF32C*		C2987	PROP ASSY		EY2R9600239
	PROP ASSY RETAIN BEARING IS CORRODED								
6111		CESSNA		MCAULY		FERRULE	CRACKED		12/1/96
		P206C		D3A32C88		C4451	BLADE	512	EY2R9600170
	BLADE PIN HOLE DIMPLED, CAUSED FERRULE CRACK								

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6111		CESSNA		MCAULY		BLADE	CORRODED	4513	1/1/96
		U206F		3AF32C*		82NC2	PROP ASSY		EY2R9600238
	BLADE SN KK041YSI CORRODED								
6114		CESSNA		MCAULY		HUB	CRACKED		12/1/96
		P206C		D3A32C88		D3944C88	NR 2 SOCKET	512	EY2R9600169
	HUB ASSY NR2 SOCKET, NR5 THREAD CRACKED, 2" LONG								
6114		CESSNA		MCAULY		HUB	CORRODED	4513	1/1/96
		U206F		3AF32C*		D5904C90	PROP ASSY		EY2R9600243
	PROP ASSY HUB IS CORRODED								
6110		CESSNA		MCAULY		RETAIN NUT	CRACKED		12/1/96
		210		E2A34C73		C3092	PROP ASSY		EY2R9600180
	PROP ASSY RETAIN NUT CRACKED THREADS								
6110		CESSNA		MCAULY		RETAIN NUT	CRACKED		10/1/96
		210		D2A36C33		C1976	PROP ASSY		EY2R9600146
	PROP ASSY RETAIN NUT CRACKED								
6114		CESSNA		MCAULY		HUB	CRACKED		12/1/96
		210		D2A34C58		C4716C58	NR 1 SOCKET		EY2R9600187
	HUB ASSY CRACKED IN NR1 SOCKET								
6114		CESSNA		MCAULY		HUB	CRACKED		10/1/96
		210		D2A36C33		C2715C33	NR 1 SOCKET		EY2R9600147
	HUB CRACKED IN NR1 SOCKET								
6110		CESSNA		MCAULY		RETAIN BEARING	CORRODED	2184	1/1/96
		T303		3AF32C506		C5270	PROP ASSY		EY2R9600216
	PROP ASSY RETAIN BEARING IS CORRODED								
6110		CESSNA		MCAULY		RET. BEARING	CORRODED		1/1/96
		310		3AF32C87		C2987	PROP ASSY		EY2R9600220
	PROP ASSY RETAIN BEARING IS CORRODED								
6110		CESSNA		MCAULY		FEATHER CYLINDER	CORRODED		1/1/96
		310		3AF32C87		C3550	PROP ASSY		EY2R9600226
	PROP ASSY FEATHER CYLINDER IS CORRODED								
6110		CESSNA		MCAULY		RETAIN BEARING	CORRODED		1/1/96
		310		3AF32C87		C2987	PROP ASSY		EY2R9600235
	PROP ASSY RETAIN BEARING CORRODED								
6110		CESSNA		MCAULY		ACTUATING PIN	CORRODED		1/1/96
		310		3AF32C87		B4459	BLADE		EY2R9600234
	BLADE ACTUATING PIN IS CORRODED								

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6110		CESSNA		MCAULY		FEATHER CYLINDER	CORRODED		1/1/96
		310R		3AF32C87		C3550	PROP ASSY		EY2R9600227
	PROP FEATHER CYLINDER IS CORRODED								
6110		CESSNA		MCAULY		RETAIN BEARING	CORRODED		1/1/96
		310R		3AF32C87		C2987	PROP ASSY		EY2R9600219
	PROP ASSY RETAIN BEARING CORRODED								
6110		CESSNA		MCAULY		RETAIN BEARING	CORRODED		1/1/96
		310R		3AF32C87		C2987	PROP ASSY		EY2R9600221
	PROP ASSY RETAIN BEARING CORRODED								
6110		CESSNA		MCAULY		FERRULE	CRACKED		12/1/96
		310R		3AF32C87		C4451	PROP ASSY	1223	EY2R9600166
	5 HOLES IN BLADE PIN HOLE, DIMPLED AND FERRULE CRACKED								
6110		CESSNA		MCAULY		RETAIN BEARING	CORRODED		1/1/96
		310R		3AF32C87		C2987	PROP ASSY		EY2R9600223
	PROP ASSY RETAIN BEARING IS CORRODED								
6111		CESSNA		MCAULY		BLADE	CORRODED		1/1/96
		310		3AF32C87		82NC55	PROP ASSY		EY2R9600231
	BLADE SN K62721YS IS CORRODED								
6111		CESSNA		MCAULY		BLADE	CRACKED		10/1/96
		310		3AF32C87		S82NC4	NR 1 SOCKET		EY2R9600117
	BLADE NR1 SOCKET CRACKED								
6111		CESSNA		MCAULY		BLADE	CORRODED		1/1/96
		310		3AF32C87		S82NC55	PROP ASSY		EY2R9600237
	BLADE SN K62727YS IS CORRODED								
6111		CESSNA		MCAULY		BLADE	CORRODED		1/1/96
		310		3AF32C87		82NC55	PROP ASSY		EY2R9600233
	BLADE SN K62754YS IS CORRODED								
6111		CESSNA		MCAULY		BLADE	CORRODED		1/1/96
		310		3AF32C87		82NC55	PROP ASSY		EY2R9600232
	BLADE SN K62780YS IS CORRODED								
6111		CESSNA		MCAULY		BLADE	CRACKED		5/1/96
		310		3AF32C87		S82NC55	THREADS		EY2R9600056
	BLADE SN F651YS, THREADS CRACKED								
6111		CESSNA		MCAULY		BLADE	CORRODED		1/1/96
		310R		3AF32C87		S82NC4	PROP ASSY		EY2R9600230
	BLADE SN F40097YS IS CORRODED								

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6114		CESSNA		MCAULY			CRACKED		7/1/96
		310		D2A34C*		C65 HUB	THREAD AREA		EY2R9600099
	HUB CRACKED IN THREAD AREA								
6114		CESSNA		MCAULY		HUB	CRACKED		6/1/96
		310		3AF32C87		D7015C87	SOCKETS		EY2R9600069
	HUB ASSY HAS ALL THREE SOCKETS CRACKED								
6114		CESSNA		MCAULY		HUB	CRACKED		7/1/96
		310		D2AF34C65		D4237C65	NR 2 SOCKET		EY2R9600100
	HUB CRACKED IN NR2 SOCKET								
6114		CESSNA		MCAULY		HUB	CRACKED		5/1/96
		310		3AF32C87		D7015C87	THREAD AREA		EY2R9600055
	HUB CRACKED IN THREAD AREA								
6114		CESSNA		MCAULY		HUB	CORRODED		1/1/96
		310		3AF32C87		D7015C87	PROP ASSY		EY2R9600236
	PROP ASSY HUB IS CORRODED								
6114		CESSNA		MCAULY		HUB	CRACKED		10/1/96
		310		3AF32C87		D7015C87	BLADE SOCKET		EY2R9600136
	HUB CRACKED IN BLADE SOCKET								
6114		CESSNA		MCAULY		HUB	CRACKED		5/1/96
		310		3AF32C87		D7015C87	NR 1 SOCKET		EY2R9600057
	HUB CRACKED IN NR1 SOCKET								
6114		CESSNA		MCAULY		HUB	CRACKED		12/1/96
		310J		D2AF34C81		D4887C81	THREAD AREA		EY2R9600168
	PROP HUB ASSY CRACKED IN THREAD AREA								
6114		CESSNA		MCAULY		HUB	CRACKED		5/1/96
		310J		D2AF34C81		D4887C81	PROP ASSY		EY2R9600064
	PROP ASSY HUB CRACKED								
6114		CESSNA		MCAULY		HUB	CRACKED		12/1/96
		310P		3AF32C87		D7027C87	THREAD AREA	1627	EY2R9600176
	HUB ASSY CRACKED THREADS								
6114		CESSNA		MCAULY		HUB	CRACKED		12/1/96
		310P		3AF32C87		D7027C87	THREAD AREA		EY2R9600177
	HUB ASSY THREAD CRACKED								
6114		CESSNA		MCAULY		HUB	CRACKED	3348	7/1/96
		310Q		3AF32C87		D5892C87	PROP	573	EY2R9600097
	HUB CRACKED								

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6114		CESSNA		MCAULY		HUB	CRACKED	3348	7/1/96
		310Q		3AF32C87		D5892C87	PROP	573	EY2R9600096
	HUB CRACKED								
6114		CESSNA		MCAULY		HUB	CRACKED		5/1/96
		310Q		D3AF32C80		D7037C80	NR 1 SOCKET		EY2R9600065
	HUB CRACKED IN NR 1 SOCKET								
6114		CESSNA		MCAULY		HUB	CRACKED		12/1/96
		310Q		3AF32C87		D7015C87	PROP ASSY		EY2R9600190
	PROP ASSY HUB CRACKED								
6114		CESSNA		MCAULY		HUB	CRACKED		10/1/96
		310R		3AF32C87		D7015C87	THREAD AREA		EY2R9600138
	HUB CRACKED IN THREADS								
6114		CESSNA		MCAULY		HUB	CRACKED		10/1/96
		310R		3AF32C87		D7015C87	NR 1 SOCKET		EY2R9600139
	HUB CRACKED IN NR1 SOCKET								
6114		CESSNA		MCAULY		HUB	CORRODED		1/1/96
		310R		3AF32C87		D7015C87	PROP ASSY		EY2R9600229
	PROP HUB ASSY CORRODED								
6114		CESSNA		MCAULY		HUB	CRACKED		9/1/96
		310R		3AF32C87		D7027C87	THREAD AREA		EY2R9600108
	HUB CRACKED IN THREAD AREA								
6110		CESSNA		MCAULY		CYLINDER PIN	CORRODED		1/1/96
		340CESSNA		3AF32C*		C1896	PROP ASSY		EY2R9600244
	PROP ASSY CYLINDER PIN IS CORRODED								
6114		CESSNA		HARTZL		HUB	CRACKED		9/1/96
		340A		PHCC3YF2		32517	PROP		EY2R9600110
	PROP HUB CRACKED								
6114		CESSNA		MCAULY		HUB	CRACKED		10/1/96
		340A		3AF32C93		D7015C93	NR 3 SOCKET		EY2R9600141
	HUB CRACKED IN NR3 SOCKET								
6114		CESSNA		MCAULY		FEATHER CYLINDER	CRACKED		6/1/96
		340CESSNA		3AF32C93		C3550	HUB		EY2R9600070
	FEATHER CYLINDER SCREW HOLES CRACKED								
6114		CESSNA		MCAULY		HUB	CRACKED		9/1/96
		340CESSNA		3AF32C87		D7015C87	PROP ASSY		EY2R9600126
	PROP HUB ASSY IS CRACKED								

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6114		CESSNA		MCAULY		HUB	CRACKED		7/1/96
		401		3AF32C87		D7015C87	THREAD AREA		EY2R9600095
	HUB CRACKED IN THREAD AREA								
6114		CESSNA		MCAULY		HUB	CRACKED		7/1/96
		401		3AF32C87		D7015C87	NR 2 SOCKET		EY2R9600098
	HUB CRACKED IN NR 2 SOCKET								
6110		CESSNA		MCAULY		FEATHER CYLINDER	CORRODED		1/1/96
		402B		3AF32C87		C3550	PROP ASSY		EY2R9600228
	PROP ASSY FEATHER CYLINDER IS CORRODED								
6110		CESSNA		MCAULY		NUT	CORRODED		1/1/96
		402B		3AF32C87		C3475	PROP ASSY		EY2R9600225
	PROP ASSY NUT IS CORRODED								
6110		CESSNA		MCAULY		RETAIN BEARING	CORRODED		1/1/96
		402B		3AF32C87		C2987	PROP ASSY		EY2R9600224
	PROP ASSY RETAIN BEARING IS CORRODED								
6110		CESSNA		MCAULY		RETAIN BEARING	CORRODED		1/1/96
		402B		3AF32C87		C2987	PROP ASSY		EY2R9600222
	PROP ASSY RETAIN BEARING IS CORRODED								
6110		CESSNA		MCAULY		FEATHER CYLINDER	CORRODED		1/1/96
		402B		3AF32C87		A3550	PROP ASSY		EY2R9600218
	PROP ASSY FEATHER CYLINDER IS CORRODED								
6114		CESSNA		MCAULY		HUB	CRACKED		10/1/96
		402A		3AF32C87		D5892C87	PROP ASSY		EY2R9600137
	PROP HUB ASSY CRACKED								
6114		CESSNA		MCAULY		HUB	CRACKED		11/1/96
		402B		3AF32C87		D5892C87	PROP ASSY		EY2R9600158
	PROP HUB ASSY CRACKED								
6114		CESSNA		MCAULY		HUB	CRACKED	4020	11/1/96
		402C		3AF32C93		D5892C93	PROP ASSY	1379	EY2R9600159
	PROP HUB ASSY CRACKED								
6111		CESSNA		MCAULY		BLADE	CRACKED		5/1/96
		414		3AF32C93		S82NC55	PROP ASSY		EY2R9600058
	BLADE SN K92082YS CRACKED								
6111		CESSNA		MCAULY		BLADE	CORRODED		1/1/96
		414		3AF32C93		82NC55	PROP ASSY		EY2R9600245
	BLADE SN K76547 IS CORRODED								

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6111		CESSNA		MCAULY		FERRULE	CRACKED		5/1/96
		414A		3AF32C93		C4451	PROP ASSY		EY2R9600059
	PROP ASSY BLADE FERRULE CRACKED								
6114		CESSNA		MCAULY		HUB	CRACKED		10/1/96
		414		3AF32C93		D7015C93	BLADE SOCKET		EY2R9600140
	HUB CRACKED IN BLADE SOCKET								
6114		CESSNA		MCAULY		HUB	CRACKED		12/1/96
		414		3AF32C93		D4344C93	NR 3 SOCKET		EY2R9600185
	HUB ASSY CRACKED IN NR3 SOCKET, NR3 THREAD								
6114		CESSNA		MCAULY		HUB	CRACKED		8/1/96
		414		3AF32C93		D7015C93	NR 1 SOCKET		EY2R9600103
	HUB CRACKED IN NR1 SOCKET								
6114		CESSNA		MCAULY		HUB	CRACKED		10/1/96
		414		3AF32C93		D7015C93	NR 1 SOCKET		EY2R9600118
	NR 1 BLADE SOCKET UNDER WELCH PLUG CRACKED								
6114		CESSNA		MCAULY		HUB	CRACKED		5/1/96
		421		3AF34C92		D5894C92	RETAIN THREADS		EY2R9600061
	HUB CRACKED IN RETENTION THREADS								
6114		CESSNA		MCAULY		HUB	CRACKED		5/1/96
		421		3AF34C92		D5894C92	RETAIN THREADS		EY2R9600060
	HUB CRACKED IN RETENTION THREADS								
6114		CESSNA		MCAULY		HUB	CRACKED	1642	6/1/96
		421		3AF34C92		D7019C92	PROPELLER		EY2R9600071
	HUB ASSY CRACKED								
6111		CONAER		HARTZL		BLADE	CRACKED		10/1/96
		LA4200		HCC2YK1		FL7666A2	SHANK		EY2R9600152
	BLADE SN D66432, CRACKED NEAR SHANK IN LIP								
6110		DHAV		HARTZL		PILOT TUBE	CRACKED		6/1/96
		DHC3		HCB3TN3		18912A	PROP		EY2R9600076
	PROP PILOT TUBE HAS 3" CRACK								
6110		DHAV		HARTZL		PILOT TUBE	CRACKED		6/1/96
		DHC3		HCB3TN3		18916A	PROP		EY2R9600077
	PROP PILOT TUBE CRACKED								
6111		DHAV		HARTZL		BLADE	CRACKED		6/1/96
		DHC3		HCB3TN3		T101731	SHANK		EY2R9600078
	PROP BLADE SHANK SN 636978, IS CRACKED								

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6111		DHAV		HARTZL		CLAMP	CRACKED		6/1/96
		DHC3		HCB3TN3		13019S	PROP ASSY		EY2R9600074
	PROP ASSY BLADE CLAMP CRACKED								
6111		DHAV		HARTZL		BLADE	CRACKED	6770	6/1/96
		DHC6300		HCB3TN3		T10282H	PROP	896	EY2R9600081
	PROP BLADE CRACKED. REWORKED, SN C69640								
6111		DHAV		HARTZL		BLADE	CRACKED	6770	6/1/96
		DHC6300		HCB3TN3		T10282H	PROP	896	EY2R9600080
	BLADE CRACKED. REWORKED, SN C69741								
6111		DHAV		HARTZL		BLADE	CRACKED	6770	6/1/96
		DHC6300		HCB3TN3		T10282H	PROP	896	EY2R9600082
	PROP BLADE CRACKED. REWORKED, SN C55993								
6111		DHAV		HARTZL		BLADE	CRACKED	6770	6/1/96
		DHC6300		HCB3TN3		T10282H	PROP LE	896	EY2R9600079
	HARD ALLOY BLADES CRACKED IN L.E.								
6110		GULSTM		HARTZL		STOP BRACKET	CRACKED		10/1/96
		690		HCB3TN5		30283	PROP HIGH STOP		EY2R9600123
	HIGH STOP BRACKET CRACKED. ALL 3 CRACKED AT PIN								
6110		GULSTM		HARTZL		STOP BRACKET	CRACKED		10/1/96
		690		HCB3TN5		30283	PROP HIGH STOP		EY2R9600124
	PROP HIGH STOP BRACKETCRACKED. ALL 3 CRACKED AT PIN								
6111		MAULE		HARTZL		BLADE	CRACKED		12/1/96
		M5200		HCE2YR1BF		F7666A	PROP ASSY		EY2R9600172
	BLADE SN H77743 IS CRACKED								
6114		MTSBSI		HARTZL		STOP	CRACKED	100	6/1/96
		MU2*		HCB4TN3		3493	HIGH PITCH		EY2R9600083
	HUB HIGH PITCH STOP BROKEN								
6110		PIPER		HARTZL		SPLIT BEARING	CRACKED		9/1/96
		PA23150		HCC2YK2		2202	PROP ASSY		EY2R9600127
	PROP ASSY SPLIT BEARING CRACKED								
6110		PIPER		HARTZL		SPLIT BEARING	CRACKED		10/1/96
		PA23250		HCE2YR2		2202	PROP ASSY		EY2R9600155
	PROP ASSY SPLIT BEARING CRACKED								
6110		PIPER		HARTZL		SPLIT BEARING	CRACKED		4/1/96
		PA23250		HCE2YR2		2202	PROP ASSY		EY2R9600051
	PROP ASSY HAS A CRACKED SPLIT BEARING								

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6110		PIPER		HARTZL		PISTON ROD	CRACKED	4550	6/1/96
		PA24400		HCC2YK1		24182	PROP		EY2R9600086
	PROP PISTON ROD CRACKED								
6114		PIPER		HARTZL		FORK	CRACKED		6/1/96
		PA24400		HCC2YK1		24573	PITCH CHANGE		EY2R9600087
	PROP PITCH CHANGE FORK CRACKED								
6111		PIPER		HARTZL		BLADE	CRACKED		6/1/96
		PA28R200		HCC2YK1		F7666A2	PROP		EY2R9600088
	BLADE SN H60744, FLANGE CRACKED								
6111		PIPER		HARTZL		BLADE	CRACKED		9/1/96
		PA31		HCE2YK2		FC84686R	PROP		EY2R9600113
	BLADE SN E45280 CRACKED								
6114		PIPER		HARTZL		BLADE	CRACKED		9/1/96
		PA31		HCE2YK2		FC84686R	PROP		EY2R9600112
	BLADE SN D73964 CRACKED								
6114		PIPER		HARTZL		BLADE	CRACKED		9/1/96
		PA31		HCE2YK2		FC84686R	PROP		EY2R9600111
	BLADE SN D70235 CRACKED								
6110		PIPER		HARTZL		SPLIT BEARING	CRACKED		10/1/96
		PA32R300		HCC2YK1		2202	PROP ASSY	3320	EY2R9600125
	PROP SPLIT BEARING CRACKED								
6111		PIPER		HARTZL		BLADE	CRACKED		6/1/96
		PA32300		HCC2YK1		F8475D4	PROP	456	EY2R9600084
	BLADE SN D11148, FLANGES CRACKED								
6111		PIPER		HARTZL		BLADE	CRACKED		6/1/96
		PA32300		HCC2YK1		F8475D4	PROP	456	EY2R9600085
	BLADE SN D3698, FLANGES CRACKED								
6111		PIPER		HARTZL		BLADE	CRACKED		8/1/96
		PA34200		HCC2YK2		FJC7666A	PROP	157	EY2R9600105
	BLADE SN H69746, TIP BROKE OFF 12"								
6110		PIPER		HARTZL		SPLIT BEARING	CRACKED		10/1/96
		PA44180T		HCC2YK2		2202	PROP ASSY		EY2R9600153
	PROP ASSY SPLIT BEARING CRACKED AT TOP OF RACE								
6111		UNIVAR		MCAULY		BLADE	CORRODED		1/1/96
		1082		2A36C29		90M8	PROP ASSY		EY2R9600201
	BLADE ASSY SN K31785YS IS CORRODED								

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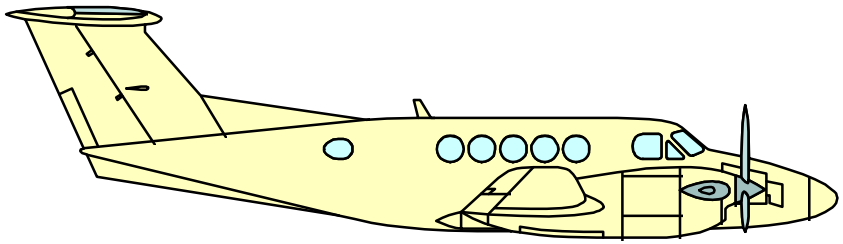
6111		UNIVAR		MCAULY		BLADE	CORRODED		1/1/96
		1082		2A36C29		90M8	PROP ASSY		EY2R9600202
	BLADE ASSY SN C45338YS IS CORRODED								
6114		UNIVAR		MCAULY		HUB	CORRODED		1/1/96
		1082		2A36C29		C2343C29	PROP ASSY		EY2R9600203
	PROP ASSY HUB IS CORRODED								

(End of DOMESTIC SERVICE DIFFICULTY REPORT SUMMARY - PROPELLERS)

INTERNATIONAL

SERVICE DIFFICULTY REPORT



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3244		AMTR				TYRE	DEFLATED		2/25/97
		JABIRUSK					LT MLG		AU970320
	(AUS) LH MAIN LANDING GEAR TYRE FLAT - AIRCRAFT RAN OFF STRIP AND HIT A MOUND OF DIRT TEARING OFF THE FRONT WHEEL AND MOUNTING BEFORE DIGGING THE NOSE INTO THE GROUND AND FLIPPING OVER - THIS DEFECT WAS RECEIVED FROM THE AUF AND IS FOR INFORMATION ONLY								
3246		AMTRM	AMTR			WHEEL	SEPARATED		2/22/97
		XP503	582				TAIL WHEEL		AU970319
	(AUS) TAIL WHEEL SEPARATED FROM AIRCRAFT - AIRCRAFT RAN OFF STRIP - DAMAGE TO RH WING TIP , PITOT AND RH UNDERCARRIAGE LEG - THIS DEFECT WAS RECEIVED FROM THE AUF AND IS FOR INFORMATION ONLY								
2820		BBAVIA	LYC		CHAMP	CLAMP	WRONG TYPE		4/15/97
		8GCBC	O360C2A			AN737TW74	FUEL HOSE		CA970505007
	(CAN) SHORTLY AFTER REFUELING THE AIRCRAFT, A MAJOR FUEL LEAK OCCURRED. INVESTIGATION REVEALED THAT THE INCORRECT SIZE OF CLAMPS WERE INSTALLED ON AN INTERCONNECT FUEL TANK HOSE. THE CLAMP FOUND IN USE WAS AN AN737TW-74. THE PARTS MANUAL SHOWS AN AN737TW-56 CLAMP. THIS PROBLEM IS RELATIVE TO BELLANCA SCOUTS WITH THE 70 GAL LONG RANGE FUEL TANK.								
2110		BEECH	PWA	HARTZL		HOSE	CONTAMINATED		3/5/97
		200BEECH	PT6A42	HCB3TN3	11791005	24112	CABIN COMPRESSOR		AU970192
	(AUS) RH AIRCONDITION SYSTEM ENGINE DRIVEN FREON COMPRESSOR SUCTION AND PRESSURE HOSES CONTAMINATED WITH RUBBER PARTICLES - SUSPECT DEBRIS FROM INCORRECT MANUFACTURING TECHNIQUE - FORWARD AND REAR EVAPORATOR TRANSFER VALVES ALSO CONTAMINATED								
2612		BEECH	PWA	HARTZL		DETECTOR	FAULTY		3/5/97
		200BEECH	PT6A41	HCB3TN3	303267	302158	FIRE DETECTION		AU970210
	(AUS) RH ENGINE FIRE DETECTORS (3OFF) FAULTY - DETECTOR AMPLIFIER ALSO REPLACED								
5610		BEECH	PWA	HARTZL		WINDSHIELD	CRACKED		3/5/97
		200BEECH	PT6A41	HCB3TN3		10138402515	PILOTS		AU970216
	(AUS) PILOTS WINDSHIELD CRACKED IN SEVERAL PLACES - WINDSHIELD HEAT WAS OPERATING AT THE TIME								
5753		BEECH	PWA			FLAP	DAMAGED		2/26/97
		B200C	PT6A42			35165050230	TE FLAP STRUCTUR		AU970198
	(AUS) LH OUTBOARD WING FLAP DAMAGED - SPAR BENT AND SKIN CREASED -INVESTIGATION FOUND A DEAD HARE ON THE RUNWAY								
5753		BEECH	CONT	MCAULY	BEECH	BRACKET	CRACKED		3/21/97
		95C55	IO520C	3AF32C75	FLAP	501600036	TE FLAP STRUCTUR		AU970317
	(AUS) RH FLAP ACTUATOR ATTACHMENT BRACKET CRACKED AND SEPARATED FROM FLAP AT THE CENTRE ATTACHMENT SCREW. WHEN DOWNWARDS PRESSURE WAS APPLIED TO THE TRAILING EDGE OF THE FLAP - INVESTIGATION FOUND APREVIOUS REPAIR UNDER THE BRACKET ALSO CRACKED AND THE RIB BELOWTHE REPAIR PNO 50-160012-2 CRACKED AND DEFORMED								
2721		BEECH	CONT			TRIM JACK	INCORRECT WIRED		3/18/97
		58	IO520C			96526000	RUD TAB CONTROL		AU970233
	(AUS) RUDDER TRIM JACK INCORRECTLY LOCKWIRED - THE TRIM JACK ROD END WAS LOCKED TO THE TRIM JACK HOUSING RETAINING NUT ALLOWING THE TRIM JACK TO ONLY ROTATE ONE TURN - THIS CONDITION HAD EXISTED FOR APPROXIMATELY 800 HOURS - PERSONNEL/MAINTENANCE ERROR								
5753		BEECH	CONT			RIB	CRACKED		3/19/97
		58	IO520C			3515605084	TE FLAP STRUCT		AU970234
	(AUS) RH FLAP RIB CRACKED IN AREA OF FLAP ACTUATOR ATTACHMENT - CRACK EMANATES FROM FORWARD ATTACHMENT BOLT HOLE IN A PREVIOUSLY REPAIRED AREA - SUSPECT CRACK DUE TO INCORRECT REPAIR								

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3233		BEECH			PRESTOLITE	COMMUTATOR	OPEN CIRCUIT		3/12/97
		76			HYH5001	AFTS1001	LANDING GEAR ACT		AU970222
	(AUS) LANDING GEAR MOTOR COMMUTATOR SEGMENT OPEN CIRCUIT DUE TO LOOSE CRIMP ON THE WINDING								
5210		BEECH				LATCH	STICKING		1/24/97
		76				10542001815	PASS/CREW DOOR		AU970299
	(AUS) LH DOOR LATCH STICKING - SUSPECT CAUSED BY LACK OF LUBRICATION								
8120		BEECH	PWA		GODFREY	SUPERCHARGER	OIL LEAK		9/24/97
		65A90	PT6A20			126106	RETURN LINE	3	CA970930005
	(CAN) TIME EXPIRED SUPERCHARGER WAS REPLACED WITH AN OVERHAULED UNIT AND THERE WAS NO INDICATION OF OIL LEAKS ON THE ENGINE GROUND TEST RUN UP. AFTER 3.3 HOURS OF FLIGHT TIME, THE FLIGHT CREW FOUND OIL INDICATOR FLOAT LEVEL LOW ON THE NEXT PRE-FLIGHT INSPECTION. THE ENGINE GEARBOX AND SUPERCHARGER WERE REPLACED WITH OVERHAULED UNITS								
5310		BNORM	LYC	HARTZL		STRUCTURE	CORRODED		3/21/97
		BN2A21	IO540K1B5	HCC2YK2			AIRCRAFT GENERAL		AU970279
	(AUS) AIRCRAFT STRUCTURE CONTAINED EXTENSIVE CORROSION:-1. MAINPLANES HAD SEALING MATERIAL MISSING FROM LOWER SPAN LAMINATES BETWEEN FUSELAGE AND ENGINE NACELLE ALLOWING MOISTURE INGRESS AND CORROSION 2. WING SKINS PEELED BACK TO REVEAL EXFOLIATION CORROSION IN AN AREA OF THE INTERSPAR STRINGER ONE BACK FROM THE FRONT SPAR IN AN AREA JUST OUTBOARD OF THE FUEL BAY AT APPROXIMATELY STN 200 3. HORIZONTAL STABILISER EXTENSIVE SURFACE CORROSION4. VERTICAL STABILISER EXTENSIVE SURFACE CORROSION5. ELEVATOR BALANCE WEIGHTS BADLY CORRODED IN STEEL SECTIONS								
5321		CESSNA		MCAULY		FLOOR	CRACKED		3/7/97
		A152		1A103TCM		04102381	FUSELAGE FLOOR	9182	AU970246
	(AUS) FLOOR CRACKED IN AREA OF SEAT RAIL ATTACHMENT AT REAR - SEAT RAIL HAS A RIGHT ANGLE END WHICH CUTS INTO FLOOR								
3222		CESSNA				FORK	BROKEN		3/10/97
		172N				SK1759	NOSE GEAR		AU970288
	(AUS) NOSE LANDING GEAR FORK SHEARED IN AREA OF PISTON TUBE ATTACHMENT- A HEAVY LANDING INSPECTION HAD BEEN CARRIED OUT 40 HOURSPREVIOUSLY								
3230		CESSNA	LYC	MCAULY		PIVOT	CRACKED		1/24/97
		172RG	O360F1A6	B2D34C220		24411001	LANDING GEAR		AU970188
	(AUS) MAIN LANDING GEAR PIVOT ASSEMBLY CRACKED AS INDICATED IN SEB 90-1 REV2								
5511		CESSNA	CONT	MCAULY		SPAR	CRACKED		3/5/97
		172G	O300C	1C172EM		0532001	HORIZONTAL STABI		AU970218
	(AUS) HORIZONTAL STABILISER FORWARD SPAR CRACKED AT CENTRE LIGHTENING HOLE AS INDICATED IN SEB 94-8 - CRACK LENGTH APPROXIMATELY 10MM (0.393IN) - SUSPECT PROBLEM CONTRIBUTED TO BY INCORRECT GROUND HANDLING								
5551		CESSNA	LYC	MCAULY		ARM	CRACKED		3/18/97
		177RG	IO360A1B6	B2D34C207	17320312	17320311	HORIZ STAB WT		AU970230
	(AUS) STABILATOR WEIGHT ARM LH AND RH REAR MOUNTING BRACKETS PNO1732031-1 AND PNO 1732031-2 CRACKED ALONG VERTICAL BENDS								
3240		CESSNA		MCAULY		PIPE	DAMAGED		4/4/97
		182Q		2A34C203		0500118126	MLG BRAKE		AU970315
	(AUS) LH BRAKE LINE PUNCTURED BY `PK' TYPE SCREW FITTED FOLLOWING REPAINTING - LOSS OF BRAKE FLUID - PERSONNEL/MAINTENANCE ERROR								
5312		CESSNA	CONT	MCAULY	CESSNA	BULKHEAD	CORRODED		3/7/97
		182D	O470R	2A34C66	182D	05B0069	FUSELAGE		AU970264
	(AUS) FORWARD CENTRE BULKHEAD LOCATED UNDER FLOOR SEVERELY CORRODED - SEE MDR 97/0252 FOR ADDITIONAL INFORMATION								

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5312		CESSNA	CONT	MCAULY		BULKHEAD	CRACKED		3/7/97
	18253162	182D	O470R	2A34C66		07193005	FUSELAGE LT AFT	5563	AU970251
	(AUS) FUSELAGE LH BULKHEAD CRACKED								
5312		CESSNA	CONT	MCAULY		BULKHEAD	CORRODED		3/7/97
	18253162	182D	O470R	2A34C66		18253162	FUSELAGE BULKHD		AU970260
	(AUS) REAR FUSELAGE BULKHEAD CORRODED IN AREA OF DORSAL FIN ATTACHMENT- SEE MDR 97/0252 FOR ADDITIONAL INFORMATION								
5313		CESSNA	CONT	MCAULY		STRINGER	CORRODED		3/7/97
	18253162	182D	O470R	2A34C66		18253162	FUSELAGE		AU970261
	(AUS) FUSELAGE STRINGERS CORRODED - SEE MDR 97/0252 FOR ADDITIONAL INFORMATION								
5330		CESSNA	CONT	MCAULY		SKIN	CORRODED		3/7/97
	18253162	182D	O470R	2A34C66		18253162	FUSELAGE MAIN PL		AU970259
	(AUS) FUSELAGE SKINS CORRODED IN AREA OF ALL SKIN JOINTS IN BOTTOMS OF BOTH CABIN ENTRY DOORS AND DOOR HINGE ATTACHMENT AREAS, CABIN ROOF CORRODED - SEE MDR 97/0252 FOR ADDITIONAL INFORMATION								
5520		CESSNA	CONT	MCAULY		ELEVATOR	CORRODED		3/7/97
	18253162	182D	O470R	2A34C66		18253162	ELEVATOR STRUCT		AU970262
	(AUS) LH AND RH ELEVATORS CORRODED - SEE MDR 97/0252 FOR ADDITIONAL INFORMATION								
5540		CESSNA	CONT	MCAULY		RUDDER	CORRODED		3/7/97
		182D	O470R	2A34C66		18253162	RUDDER STRUCTURI		AU970263
	(AUS) RUDDER CORRODED - SEE MDR 97/0252 FOR ADDITIONAL INFORMATION								
5711		CESSNA	CONT	MCAULY		SPAR	CORRODED		3/7/97
	18253162	182D	O470R	2A34C66		18253162	WING SPAR STRUCT		AU970252
	(AUS) LH WING FRONT MAIN SPAR CORRODED - SEE MDR 97/0255 TO MDR 97/0265 FOR ADDITIONAL DEFECTS REPORTED UNDER THE SAME MDR NUMBER								
5711		CESSNA	CONT	MCAULY		SPAR	CRACKED		3/7/97
	18253162	182D	O470L	2A34C66		052340053	WING SPAR STRUCT	5562	AU970249
	(AUS) WING REAR SPAR CRACKED IN RADIUS OF WING ATTACHMENT WEB								
5711		CESSNA	CONT	MCAULY		SPAR	CORRODED		3/7/97
	18253162	182D	O470R	2A34C66		121002926	WING SPAR STRUCT		AU970265
	(AUS) CENTRE SECTION REAR CARRY THROUGH SPAR CORRODED - SEE MDR 97/0252 FOR ADDITIONAL INFORMATION								
5712		CESSNA	CONT	MCAULY		RIB	CORRODED		3/7/97
	18253162	182D	O470R	2A34C66		18253162	WING RIB STRUCTU		AU970255
	(AUS) LH AND RH WINGS CORRODED IN AREA BETWEEN RIBS AND SKIN - SEE MDR97/0252 FOR ADDITIONAL INFORMATION								
5730		CESSNA	CONT	MCAULY		SKIN	CORRODED		3/7/97
	18253162	182D	O470R	2A34C66		18253162	WING PLATES		AU970256
	(AUS) LH AND RH WING TOP AND BOTTOM SKINS CORRODED - WING INSPECTION PANELS ALSO CORRODED - SOME RIVETS MISSING - SEE MDR 97/0252 FORADDITIONAL INFORMATION								
5751		CESSNA	CONT	MCAULY		AILERON	CORRODED		3/7/97
	18253162	182D	O470R	2A34C66		18253162	AILERON STRUCTUR		AU970258
	(AUS) LH AND RH AILERONS CORRODED - SEE MDR 97/0252 FOR ADDITIONALINFORMATION								

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5753		CESSNA	CONT	MCAULY	CESSNA	FLAP	CORRODED		3/7/97
		182D	O470R	2A34C66	182D	18253162	TE FLAP STRUCTUR		AU970257
	(AUS) LH AND RH WING FLAPS CORRODED - SEE MDR 97/0252 FOR ADDITIONALINFORMATION								
2410		CESSNA	CONT	MCAULY	ELECTROSY	ALTERNATOR	LOOSE NUT		9/30/97
		U206F	IO520F	D3A34C401		DOFF10300JR	PULLEY	12	CA971014001
	(CAN) REBUILT ELECTROSYSTEMS ALTERNATOR INSTALLED DUE TO A PREVIOUS ALTERNATOR PROBLEM. APPROXIMATELY 11 FLIGHT HOURS AFTER INSTALLATION THE PULLEY WORKED OFF THE ALTERNATOR SHAFT BREAKING THE BELT. THE PULLEY WAS ASSEMBLED ON THE ALTERNATOR AS AN OVERHAULED UNIT. THE PULLEY RETAINING NUT WAS LIKELY NOT TORQUED PROPERLY AT THE FACTORY.								
2822		CESSNA				FUEL PUMP	RUSTED		5/3/97
		U206G				477003	LEFT AUXILIARY		CA971027011
	(CAN) LEFT AUXILIARY FUEL PUMP CORRODED AND BOTH THE LEFT AND RIGHT CHECK VALVES P/N FACKV-4-100-6 FUND CLOGGED. THIS AIRCRAFT HAS FLINT STC SYSTEM STEEL PARTS WHICH ACCORDING TO SUBMITTER ARE CAUSING THE CORROSION AND CAN CLOG FUEL SYSTEM. STC SA4368WE.								
2822		CESSNA				FUEL PUMP	RUSTED		3/12/97
		U206G				477003	LEFT AUXILIARY		CA971027013
	(CAN) LEFT AUXILIARY FUEL PUMP FOUND RUSTED. THIS AIRCRAFT CONTAINS FLINT AUXILIARY SYSTEM AS PER STC SA4368WE WHICH CONTAINS STEEL PARTS AND ACCORDING TO SUBMITTER CAUSES THE RUSTING AND COULD CLOG THE FUEL SYSTEM. THE AIRCRAFT REGISTRATION IS NOW C-FJST								
2842		CESSNA				FUEL TRANSDUCER	RUSTED		7/17/97
		U206G				FA2091	LEFT HAND		CA971027012
	(CAN) THE LEFT FUEL TRANSDUCER FOUND RUSTED, REPLACED BY NEW PLASTIC TYPE. THIS AIRCRAFT HAS THE FLINT AUXILIARY SYSTEM STC SA4366WE INSTALLED WHICH CONTAINS STEEL PARTS AND ACCORDING TO SUBMITTER IS CAUSING THE CORROSION AND CAN CLOG FUEL SYSTEM.								
2822		CESSNA	CONT			FUEL PUMP	RUSTED		7/17/97
		T210L	TSIO520H			480532	RIGHT AUXILIARY		CA971027010
	(CAN) RIGHT AUXILIARY FUEL PUMP FOUND RUSTED. ALSO LEFT AND RIGHT CHECK VALVES PART NO. FACKV-5-100-6 FOUND CLOGGED. THIS AS A RESULT OF INSTALLATION OF FLINT AUXILIARY SYSTEM STC SA2862WE, SA3266NM OR SA4300WE ACCORDING TO SUBMITTER.								
2910		CESSNA	CONT	MCAULY		HOSE	FAILED		2/11/97
		210N	IO520F	D3A34C404		S2178C40150	HYDRAULIC, MAIN		AU970312
	(AUS) LANDING GEAR HYDRAULIC HOSE FAILED AT FITTING - SUSPECT INCORRECT HOSE FITTED - UNAPPROVED PART - PERSONNEL/MAINTENANCE ERROR								
3222		CESSNA	CONT	MCAULY		TORQUE LINK	CRACKED		3/20/97
		210N	IO520L	D3A32C88		12434262	NOSE GEAR		AU970297
	(AUS) NOSE LANDING GEAR TORQUE LINK CRACKED ON FORWARD REINFORCING WEBS								
3260		CESSNA	CONT	MCAULY		WIRE	BROKEN		3/18/97
		310R	IO520M	3AF32C87			LANDING GEAR POS		AU970232
	(AUS) RH MAIN LANDING GEAR MICROSWITCH EARTH WIRE BROKEN								
5712		CESSNA		MCAULY		RIB	CRACKED		1/20/97
		402B		3AF32C87	082217518	082217517	LT WHEEL BAY		AU970306
	(AUS) LH WHEEL BAY CENTRE RIB UPPER CAP CRACKED IN AREA ACROSS ALLTHREE UPPER BRACKET BOLT HOLES								
2510		CESSNA		MCAULY		SEAT	CRACKED		3/5/97
		404CESSNA		3FF32C501		081278211	COPILOT		AU970215
	(AUS) COPILOTS SEAT BASE AUXILIARY SUPPORT STRUCTURE CRACKED IN TWO AREAS								

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
5500		CESSNA		HARTZL		EMPENNAGE	LIGHTNING STRIKE		2/19/97
		441		HCB3TN5			EMPENNAGE STRUC		AU970291
	(AUS) AIRCRAFT LIGHTENING STRIKE - ENTRY POINT APPEARS TO BE LH FLAP AND AILERON - BOTH ELEVATORS HAD EXIT HOLES ADJACENT TO OUTER STATIC WICKS - RUDDER TOP FAIRING HAD EXIT HOLE AND EVIDENCE OF BURNING - UPPER RUDDER SKIN HAD EVIDENCE OF ARCING								
6120		CESSNA		HARTZL	GARRTT	VALVE	STICKING		3/11/97
		441		HCB3TN5	TPE3318	7715649001	PROP CONTROL		AU970292
	(AUS) NTS CHECK VALVE ON GEARCASE STICKING ALLOWING HIGH PRESSURE GOVERNOR OIL TO ACTIVATE BETA SWITCH								
2820		DHAV	PWA			END FITTING	FAILED		8/27/97
		DHC3	R1340AN2		MS2874110020		FUEL SYS		CA970922028
	(CAN) DURING CRUISE THE PILOT COMPLAINED OF THE SMELL OF FUEL. FUEL FOUND LEAKING FROM BEHIND THE COWL WITH ELECTRIC FUEL PUMP ON.								
3250		DHAV	PWA		HEROUX	STUD	SHEARED		6/27/97
		DHC6300	PT6A27		7110031	712761	NLG STEERING	215	CA970922018
	(CAN) AFTER LANDING PILOT NOTICED A LOSS OF STEERING CONTROL WITH TILLER. INVESTIGATION DETERMINED THAT THE STEERING STUD HAD SHEARED WHERE ROLL PIN SECURES IT TO STEERING COLLAR. FURTHER INVESTIGATION DETERMINED THAT THE STUD ASSEMBLY SHEARED WHERE THE THREAD FINISHES AT THE LOWER END DUE TO EXCESS CLEARANCE IN THE SLEEVE BORE WHICH SUBJECTED THE STUD TO AN ALTERNATING SHEAR LOAD.								
2750		EMB	PWA	HARTZL		SELECTOR SWITCH	BROKEN		3/4/97
		EMB110P1	PT6A34	HCB3TN3		110P28311298	TE FLAP CONTROL		AU970268
	(AUS) AFTER TOUCH DOWN THE COPILOTS KNEE ACCIDENTLY BROKE THE FLAP SELECTOR LEVER - INVESTIGATION LATER FOUND THE LEVER EXCESSIVELY WORN AND WEAKENED DUE TO THE CONTINUAL SLIDING CONTACT WITH THE DETENT PLATE								
3211		GROB	LYC	HARTZL		BRACKET	CRACKED		4/1/97
		G115C	O360A1F6	HCF2YR1		115C5031	LT MLG ATTACH		AU970294
	(AUS) LH MAIN LANDING GEAR ATTACHMENT BRACKET CRACKED AT FORWARD LOWER SECTION								
7120		GULSTM	LYC	HARTZL	GULSTM	MOUNT	BROKEN		3/24/97
		114	IO540T4B5	HCC2YR1	114	6250001	ENGINE MOUNT SEC		AU970314
	(AUS) ENGINE MOUNT ASSEMBLY TUBE CRACKED AT LH NLG TRUNNION - TRUNNION PIN DEFORMED - AIRCRAFT USED FOR PILOT TRAINING								
2810		GULSTM	LYC	HARTZL		FUEL CELL	LEAKING		3/17/97
		500S	IO540E1B5	HCA3VK2		5630061502	FUEL STORAGE		AU970267
	(AUS) RH WING FUEL CELL LEAKING - ON REMOVAL OF THE TANK EXTENSIVE DETERIORATION OF THE INTERNAL AND EXTERNAL COATING OF TANK WAS EVIDENT - THE CELL WAS MANUFACTURED IN NOVEMBER 1978 AND CONSTRUCTED FROM BTC-67 MATERIAL								
7921		PIPER	LYC	SNSNCH		O-RING	DETERIORATED		2/10/97
		PA18150	O320A2B	M74DM			ENG OIL COOLER		AU970242
	(AUS) ENGINE OIL COOLER TO PRESSURE LINE `O'- RING SEAL DETERIORATED AND LEAKING								
2752		PIPER		HARTZL		ACTUATOR	WORN		3/19/97
		PA31350		HCE3YR2		489426	TE FLAP ACTUATOR		AU970307
	(AUS) FLAP ACTUATOR WORN BEYOND LIMITS								
2822		PIPER		HARTZL	WELDON	PUMP	FAILED		3/18/97
		PA31350		HCE3YR2	421136	421136	FUEL BOOST PUMP	1507	AU970243
	(AUS) FUEL BOOST PUMP FAULTY - INVESTIGATION FOUND ONE OF THE MOTOR BRUSHES WORN AWAY - A COUPLING SPLINE BETWEEN THE MOTOR AND THE PUMP WAS BADLY WORN - PUMP BLADE SUPPORT BLOCK BADLY WORN - COMMUTATOR DAMAGED DUE TO LOSS OF BRUSH								

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2700		PIPER		HARTZL		CABLE	BROKEN		2/5/97
		PA34200T		BHCC2YF2			FLIGHT CONTROLS		AU970239
	(AUS) UNKNOWN CABLE BROKEN - LIMITED INFORMATION PROVIDED								
5312		PIPER	LYC	HARTZL		BULKHEAD	CORRODED		3/17/97
		PA34200	IO360C1E6	HCC2YK2		VARIOUS	FUSELAGE MAIN BU		AU970254
	(AUS) FUSELAGE REAR BULKHEAD CORRODED IN AREA OF STABILATOR ATTACHMENT BRACKETS - RIVETS POPPED AT FRAME OF FORWARD FIN ATTACHMENT AREA- FOLLOWING REMOVAL OF TOP AFT FUSELAGE SKIN AND SKIN ON FIN AND STABILISER. WIDE SPREAD SURFACE CORROSION WAS FOUND WHERE FRAMES AND STRINGERS ATTACH - SUSPECT DUE TO LACK OF CORROSION PROTECTION DURING MANUFACTURE								
5751		PIPER	LYC			RIB	CRACKED		3/13/97
		PA44180	O360E1A6		8639804	8639604	AILERON STRUCTUR		AU970221
	(AUS) AILERON NOSE RIBS PNO 86396-04 AND PNO 86398-04 CRACKED ATATTACHMENT BRACKETS								
5712		SOCATA	LYC	HARTZL		RIB	CORRODED		4/1/97
		TB10TOBAGO	O360A1A	HCC2YK1		TB101106100	RT WING		AU970298
	(AUS) RH WING ROOT RIB LOWER FLANGE CORRODED IN AREA OF RIB TO LOWER WING SKIN ATTACHMENT RIVETS - AIRCRAFT OPERATES IN A SALT LADENENVIRONMENT AND IS NOT HANGARED								
5751		SOCATA	LYC	HARTZL	SOCATA	BALANCE WEIGHT	LOOSE		4/1/97
		TB10TOBAGO	O360A1A	HCC2YK1	AILERON		AILERON		AU970293
	(AUS) LH AILERON BALANCE WEIGHT LOOSE - `POP' RIVETS MOVING								
2700		UNIVAR		MCAULY		CABLE	FAULTY		3/4/97
		415D		1B90CM		41552172S	FLIGHT CONTROL		AU970285
	(AUS) CONTROL CABLES ATTACHED TO PRIMARY CONTROL QUADRANT IN CONTROL COLUMN YOKE HAD FAULTY SWAGING - DURING TESTING CABLES PULLED THROUGH THE NICOPRESS SLEEVES AT A LOAD OF 610 LBS (NORMAL FAILURE LOAD 2200 LBS TO 2300LBS) - AIRCRAFT IS IMPORTED FROM THE USA AND IS UNDERGOING INITIAL COFA - US REGISTRATION N94022								

(End of INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - AIRCRAFT)

INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - HELICOPTERS

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
5320		BELL	ALLSN			STRUCTURE	CRACKED		3/24/97
		206L1	250C28B				FUSELAGE		AU970300
	(AUS) FUSELAGE STRUCTURE CRACKED WHERE VERTICAL CONTROL TUNNEL JOINS ROOF STRUCTURE IN AREA BELOW SERVO MOUNTING - FOUND DURING INSPECTION IAW AD/BELL206/82								
2435		BELL	PWA			MOUNT	WORN		9/15/97
		212	PT6T3			230461763	START/GEN		CA970922009
	(CAN) DURING FLIGHT NR1 GENERATOR WENT OFF LINE AND WAS RESET. SMOKE WAS OBSERVED COMING FROM NR1 ENGINE, SO HELICOPTER LANDED. FIRE WAS OBSERVED COMING FROM NR1 ENGINE WHICH WAS EXTINGUISHED BY AME. INITIAL INVESTIGATION INDICATES THE ALIGNMENT DOWEL WEAR ON THE STARTER GENERATOR MOUNTING FLANGE MAY HAVE ALLOWED THE STARTER/GENERATOR TO ROTATE ALLOWING THE HARNESS TO CHAFE THE FUEL LINE CAUSING A LEAK WHICH WAS IGNITED BY THE SPRAY ON THE STARTER GENERATOR								
6720		SKRSKY	ALLSN			SUPPORT	CRACKED		3/14/97
		S76A	250C30			7640301111041	T/R CONTROL		AU970229
	(AUS) TAIL ROTOR CONTROL PEDAL CENTRE SUPPORT CRACKED AT THE UPPER SUPPORT TUBE WELDED JOINT								
7261		SKRSKY	TMECA		TMECA	OIL SYSTEM	CONTAMINATED		3/14/97
		S76C	ARRIEL1S		0292005250	15514	TURBINE ENG OIL		AU970287
	(AUS) NO2 ENGINE CHIP DETECTORS, MAGNETIC PLUGS AND FILTER CONTAMINATED WITH METAL PARTICLES								
7261		SKRSKY	TMECA		TMECA	CHIP DETECTOR	CONTAMINATED		3/13/97
		S76C	ARRIEL1S		0292005250	15515	TURBINE ENG OIL		AU970282
	(AUS) NO1 ENGINE OIL SYSTEM CHIP DETECTORS CONTAMINATED - TYPE III PARTICLE (METAL SLIVER) ON MPI 1 CHIP DETECTOR - TYPE II PARTICLES (DARK DUST) ON MAGNETIC PLUGS - OIL AND FILTER CHANGEDAND ENGINE GROUND RUN SERVICEABLE								

(End of INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - HELICOPTERS)

INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - ENGINES

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
8530		BBAVIA	LYC			CYLINDER	FAILED	1	8/22/97
		7ECA	O235C1			OSK21232	INT VALVE SEAT		CA970923001
	(CAN) FACTORY NEW CYLINDER INSTALLED ON ANNUAL INSPECTION. AIRCRAFT TEST FLOWN AND PARKED. NEXT MORNING ON START UP THE ENGINE RAN ROUGH. INVESTIGATION FOUND NR4 CYLINDER INTAKE VALVE SEAT DISLODGED. NR4 CYLINDER REPLACED.								
7210		BEECH	PWA			PLANETARY GEAR	SEPARATED		6/29/97
		200BEECH	PT6A41			310152501	REDUCTION GEARBX	2370	CA970916003
*****	(CAN) DURING FLIGHT A CHIP DETECTOR LIGHT CAME ON NR2 ENGINE. THE ENGINE WAS SHUTDOWN AND THE FLIGHT CONTINUED TO DESTINATION. POST FLIGHT INSPECTION FOUND METAL IN THE OIL FILTER. THE ENGINE WAS SENT FOR INVESTIGATION AND DISASSEMBLY OF THE REDUCTION GEARBOX ASCERTAINED THE MAIN DAMAGE AND PROBABLE SOURCE OF THE METAL PARTICLES ON THE CHIP DETECTOR WAS A PIECE OF METAL MISSING FROM THE END OF ONE TOOTH ON ONE OF THE 1ST STAGE PLANET GEARS. THIS WAS NO DISCOLORATION OF THE CARRIERS OR OTHER COMPONENTS INDICATING LACK OF LUBRICATION. CLOSER INSPECTION OF THE 1ST STAGE PLANET GEARS AND THE SUN GEARS REVEALED SIGNIFICANT SPALLING ON THE TEETH, WHICH LED TO FAILURE AND METAL CONTAMINATION.								
8530		BEECH	CONT	MCAULY	CONT	VALVE	FAULTY		2/21/97
		A36	IO520B	3A32C76	IO520BB	652956	NR 3 & 4 EXH	3	AU970295
	(AUS) NO4 CYLINDER EXHAUST VALVE FAULTY - FURTHER INVESTIGATION FOUND NO3 CYLINDER EXHAUST VALVE IN SIMILAR CONDITION - METAL CONTAMINATION OF OIL SYSTEM								
7250		BEECH	PWA		PWA	BOLT	WRONG PART	566	9/18/97
		65A90	PT6A20		3020259	MS956508	CT SHROUD ASSY		CA970922020
*****	(CAN) DURING INSPECTION BOLTS ON THE COMPRESSOR TURBINE SHROUD ASSEMBLY HOUSING WERE FOUND DEFORMED WITH MATERIAL LOSS. INVESTIGATION FOUND THE BOLTS USED IN THIS INSTALLATION WERE THE WRONG PART.								
8520		BEECH	CONT			CAMSHAFT	WORN		9/26/97
		95B55	IO470L			649478	CAMLOBE NR 5 EXH	817	CA971015058
	(CAN) THE NR2 ENGINE OIL PAN WAS REMOVED TO FACILITATE THE REPAIR OF AN OIL LEAK. INSPECTION OF THE NOW EXPOSED AREA FOUND THE NR5 CYLINDER EXHAUST VALVE CAM LOBE BADLY WORN. THE ENGINE WAS REPLACED AND THE AIRCRAFT RETURNED TO SERVICE.								
8530		CESSNA	CONT	MCAULY		CYLINDER	CRACKED		10/1/97
		150L	O200A	1A102OCM		641917	CYLINDER BARREL	1009	CA971007010
	(CAN) AFTER NOTICING AN OIL STREAK COMING FROM BETWEEN THE HEAD AND THE BARREL, THE CYLINDER WAS REMOVED AND A CRACK WAS FOUND ONE INCH FROM THE TOP OF THE CYLINDER.								
7310		CESSNA	CONT	MCAULY		FUEL INJECT LINE	BROKEN		9/24/97
		R172K	IO360K	2A34C203		630662	NR 6 INJECTOR	104	CA970930002
	(CAN) DURING FLIGHT THE ENGINE WAS RUNNING ROUGH WITH A LOSS OF POWER. THERE WAS ALSO THE SMELL OF FUEL. POST FLIGHT INSPECTION FOUND THE NR6 FUEL INJECTOR LINE BROKEN AT THE DISTRIBUTOR CENTRE OF THE ENGINE. THE CAUSE OF THE FAILURE WAS THE THROTTLE CONTROL COMING IN CONTACT WITH THE FUEL INJECTOR LINE.								
7322		CESSNA	CONT			CARBURETOR	FAILED		9/27/97
		172D	O300C			104439	ENGINE	1153	CA971010008
	(CAN) DURING CRUISE THE ENGINE BEGAN TO SUFFER POWER LOSS WITHOUT WARNING. EMERGENCY LANDING WAS CARRIED OUT. POST FLIGHT INSPECTION FOUND FUEL POURING FROM THE CARBURETOR. THE CARBURETOR WAS REPLACED WITH AN OVERHAULED UNIT AND THE ENGINE WAS GROUND RUN SERVICEABLE.								
7414		CESSNA	LYC	MCAULY		MAGNETO	FAILED		2/8/97
		172M	O320E2D	1C160DTM		4251R	MAGNETO/DISTRIBU		AU970214
	(AUS) MAGNETO FAILED - INSPECTION FOUND HT COIL SECONDARY WIRING OPEN CIRCUIT								

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8530		CESSNA	LYC	MCAULY		CYLINDER	CRACKED		3/11/97
		172P	O320D2J	1C160DTM		12416	NR 1 CYL PLUG	1343	AU970278
	(AUS) NO1 CYLINDER CRACKED FROM BOTH SPARK PLUG HOLES - CRACK LENGTHS 19.05MM (0.75IN) - EXHAUST VALVE SEAT BORE CRACKED - CRACK LENGTH 12.7MM (0.5IN)								
7313		CESSNA	CONT	MCAULY		INJECTOR	BLOCKED		2/28/97
		210N	IO520L	D3A34C404		627335D13B	NR 2 CYL FUEL	756	AU970247
	(AUS) NO2 CYLINDER FUEL INJECTOR NOZZLE BLOCKED								
8520		CESSNA	CONT	MCAULY		CRANKCASE	CRACKED		2/25/97
		210L	IO520L	E2A34C73		294762R	NR 4 & 5 MAIN		AU970296
	(AUS) ENGINE BULK STRIPPED FOLLOWING PROPELLER STRIKE - CRANKCASE FOUND TO BE CRACKED BETWEEN NO4 AND NO5 MAIN BEARING SADDLES - FOUND USING FPI								
8520		CESSNA	CONT	MCAULY		CRANKCASE	DEFECTIVE		3/17/97
		210N	IO520L	D3A34C404		280127R	RECIP ENG		AU970277
	(AUS) AT ENGINE OVERHAUL THE CRANKCASE WAS BOLTED TOGETHER AND TUNNELS WERE MEASURED OUT OF LIMITS								
8530		CESSNA	CONT	MCAULY		CYLINDER	STRIPPED		3/16/97
		210M	IO520L	D3A34C404		653446	FUEL NOZZLE	545	AU970231
	(AUS) ENGINE CYLINDER HEAD FUEL NOZZLE RETAINING THREADS STRIPPED - FUEL NOZZLE LOOSE - CYLINDER IS 0.0015IN PLUS OVERSIZE WITH UNKNOWN TOTAL TIME IN SERVICE - AD/CON/60 CARRIED OUT 50 HOURSPRIOR TO FAILURE								
8530		CESSNA	CONT	MCAULY		CYLINDER	WORN		3/21/97
		310N	IO470V	D3AF32C80		649168CEA3	RECIP ENG BORE		AU970274
	(AUS) ENGINE CYLINDER (PNO 649168CEA3) BORES WORN BEYOND LIMITS - CYLINDERS ARE CERMICHROME TYPE								
8520		CESSNA	CONT	MCAULY		CRANKCASE	CRACKED		3/21/97
		404CESSNA	GTSIO520M	3FF32C501		276347R	NR 2 CYL PAD		AU970271
	(AUS) AT ENGINE OVERHAUL THE FOLLOWING COMPONENTS WERE FOUND UNSERVICEABLE:1. CRANKCASE WAS FPI AND WAS FOUND CRACKED INSIDE NO2 CYLINDER PAD2. CAMSHAFT LOBE CRACKED - CRACK LENGTH 19MM (0.75IN) 3. QUILL SHAFT HAD BADLY GALLED SPLINES								
8520		CESSNA	CONT	MCAULY		CAMSHAFT	SPALLED	197	10/3/97
		414A	TSIO520NB	3AF32C93		653058	ENGINE		CA971015060
	(CAN) OIL FILTER INSPECTION FOUND METAL CONTAMINATION. ENGINE WAS SENT FOR INVESTIGATION AND REPAIR. DISASSEMBLY FOUND WEAR/SPALLING ON THE CAMSHAFT LOBES AND THE CAM FOLLOWERS FACE. THE CAMSHAFT AND FOLLOWERS WERE REPLACED. THE ENGINE WAS CLEANED, REASSEMBLED AND RETURNED TO SERVICE.								
7314		CESSNA	CONT	MCAULY		PUMP	FAULTY		3/5/97
		421C	GTSIO520L	3FF32C501		2B729	ENGINE FUEL PUMP	5	AU970211
	(AUS) ENGINE FUEL PUMP FAULTY - SUSPECT INTERNAL STICKING IN SOLENOID - PUMP HAD COMPLETED 4.8 HOURS TIME SINCE OVERHAUL								
7322		DHAV	PWA		STROMBER	CARBURETOR	FAILED		9/13/97
		DHC2MK1	R985AN14B			NAR9B	FLOATNEEDLE SEAT		CA970926001
	(CAN) ENGINE EXPERIENCED LOSS OF POWER AND SURGING IN FLIGHT. TROUBLESHOOTING REVEALED CARBURETOR PROBLEMS, OVERHAULED CARBURETOR INSTALLED AND ENGINE OPERATION RETURNED TO NORMAL. FAULTY CARBURETOR DISASSEMBLED AND FLOAT AND NEEDLE ASSEMBLY WAS FOUND JAMMED AND NEEDLE SEAT WAS FOUND UNSCREWED AND NEARLY UNSEATED FROM SEAT BOSS IN BOWL CASTING. THE NEEDLE SEAT LOCKING DEVICE DID NOT PREVENT THE SEAT FROM BACKING OUT EVEN THOUGH IT WAS SECURE IN THE BOWL. THE TEETH OF THE DEVICE APPEARED WORN								
7414		DHAV	PWA			SPRING BOSS	CORRODED		9/6/97
		DHC2MK1	R985AN14B				SPRING AND CAP		CA970916006
	(CAN) INTERMITTENT HOT OR LIVE MAGNETO CAUSED FROM CORROSION BETWEEN BERYLLIUM COIL SPRING AND BRASS KNURLED CAP. CLEANED WITH NITRIC ACID AND RESET RIVET.								

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7322		DHAVXX	DHAVXX			CARBURETTOR	CONTAMINATED		1/13/97
		DH82AROBRT	GIPSYMAJOR				FUEL CONTL/CARB		AU970240
	(AUS) CARBURETTOR BANJO FITTING CONTAMINATED WITH WATER AND SEDIMENT -AIRCRAFT CRASHED ON TAKEOFF								
7414		DHAVXX	DHAVXX		BTH	POINTS	OUT OF ADJUST		1/13/97
		DH82AROBRT	GIPSYMAJOR		AG46	28729	MAGNETO		AU970237
	(AUS) MAGNETO POINTS CLOSED - TIMING OUT OF ADJUSTMENT								
8530		DHAVXX	DHAVXX			NUT	LOOSE		1/13/97
		DH82AROBRT	GIPSYMAJOR			77	CYL HOLD DOWN		AU970235
	(AUS) CYLINDER HEAD HOLD DOWN NUTS LOOSE - HEAD MOVING ON CYLINDER BARREL								
8530		DHAVXX	DHAVXX			TAPPET	OUT OF ADJUST		1/13/97
		DH82AROBRT	GIPSYMAJOR			77	ENG VALVES		AU970236
	(AUS) ALL VALVE TAPPET CLEARANCES OUT OF ADJUSTMENT								
8530		DHAVXX	DHAVXX			NUT	LOOSE		1/13/97
		DH82AROBRT	GIPSYMAJOR				ENG EXH MANIFOLD		AU970238
	(AUS) ENGINE EXHAUST MANIFOLD ATTACHMENT NUTS LOOSE - ONE NUT MISSING - ONE STUD IN CYLINDER HEAD PULLED								
8520		MOONE	LYC	HARTZL		CAMSHAFT	WORN		2/13/97
		M20E	IO360A1A	HCC2YK1		LW18840	RECIP ENG LOBES	1080	AU970273
	(AUS) ENGINE WAS BULK STRIPPED FOLLOWING METAL CONTAMINATION OF OIL FILTER - CAMSHAFT LOBES FOUND TO BE WORN								
8530		MOONE	LYC	HARTZL		VALVE	FAILED		3/21/97
		M20J	IO360A3B6	HCC2YK1			NR 3 CYL EXH		AU970281
	(AUS) NO3 CYLINDER EXHAUST VALVE HEAD FAILED								
8550		PARTEN	LYC	HARTZL		ELBOW	LOOSE		4/9/97
		P68B	IO360A1B6	HCC2YK2		MS208234D	LT ENG OIL LINE		AU970332
	(AUS) LH ENGINE OIL PRESSURE LINE 45 DEGREE ELBOW FITTING LOOSE AND LEAKING - FITTING IS LOCATED ON THE CABIN HEAT EXCHANGER EXHAUST MANIFOLD								
8520		PIPER	LYC			CRANKCASE	CRACKED		9/25/97
		PA60600	IO540K1J5				RIGHT HALF	1269	CA971015056
	(CAN) DURING NIGHT FLIGHT THE PILOT OBSERVED AN INCREASE IN E.G.T. ON THE NR1 ENGINE, SPARKS WERE SEEN COMING INTERMITTENTLY FROM THE EXHAUST. AIRCRAFT RETURNED TO BASE. THE FUSELAGE AND STABILIZER WERE COVERED WITH OIL. FURTHER INSPECTION FOUND THE ENGINE CRANKCASE CRACKED. THE ENGINE WAS REPLACED.								
8520		PIPER	LYC			TAPPET BODY	BROKEN		3/25/97
		PA60600	IO540K1J5			72877	NR 3 CYL INT	797	AU970310
	(AUS) NO3 CYLINDER INLET VALVE TAPPET BODY BROKEN - PUSHROD TUBES LIGHTLY DISPLACED AND LEAKING OIL								
8530		PIPER	LYC	SNSNCH		CYLINDER	CRACKED		3/1/97
		PA28161	O320E3D	74DM		LW12397	NR 3 & 4 CYLS	1500	AU970219
	(AUS) NO1, NO3 AND NO4 CYLINDERS CRACKED FROM LOWER SPARK PLUG HOLES -CRACKS HEADING TOWARDS EXHAUST VALVE SEAT - CYLINDERS WERE NITRIDED ITEMS AND HAD COMPLETED TWO ENGINE LIVES								
8520		PIPER	LYC		LYC	STUDS	FRACTURED	1657	9/27/97
		PA31350	TIO540J2BD			3813	CYLINDER BASE		CA971007015
	(CAN) ENGINE OIL LEAK NOTICED DURING FLIGHT AND PRECAUTIONARY LANDING CARRIED OUT AT NEAREST AIRPORT. POST FLIGHT INSPECTION FOUND FIVE CYLINDER HOLDDOWN STUDS FRACTURED. ALL ENGINE PARAMETERS WERE NORMAL.								

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
8530		PIPER	CONT			PISTON RING	BROKEN	256	10/8/97
		PA34200T	TSIO360E			648042	ENG CYL		CA971016002
	(CAN) DURING CYLINDER REMOVAL TO CORRECT AN OIL CONSUMPTION PROBLEM, IT WAS FOUND THAT PISTON RING (P/N 684042) WAS BROKEN. IT APPEARS THERE WAS A CASTING PROBLEM DURING MANUFACTURER.								
7414		PIPER	LYC			DISTRIBUTOR ASSY	CRACKED		9/25/97
		PA44180	O360E1A6			10682054	MAG DIST GEAR	650	CA971007007
	(CAN) PILOT RETURNED TO RAMP AFTER BEING UNABLE TO CLEAR WHAT APPEARED TO BE A FOULED SPARK PLUG. PLUGS AND IGNITION WIRES CHECKED SERVICEABLE. THE MAGNETO WAS REMOVED AND USING A CABLE LEAD TESTER FOUND THE NR1 TOWER TO BE SHORTING TO GROUND. THE DISTRIBUTOR BLOCK AND BEARING ASSEMBLY WERE REMOVED AND A CRACK WAS FOUND UNDER THE DISTRIBUTOR GEAR. THE CRACK WAS FROM THE NR2 ELECTRODE TO THE CENTRE AREA HOLDING THE BEARING. THE DISTRIBUTOR BLOCK ASSEMBLY WAS REPLACED AND THE MAGNETO WAS REINSTALLED ON THE ENGINE AND TESTED SERVICEABLE.								
7414		RKWELL	LYC			MAGNETO	WORN		9/23/97
		700	TIO540R2AD			1038291013	MAGNETO DRIVE	1820	CA971014004
	(CAN) ENGINE BEGAN TO RUN ROUGH IN FLIGHT. ENGINE WAS SECURED. POST FLIGHT INSPECTION FOUND THE CIRCLIP RETAINER ON THE MAGNETO DRIVE SHAFT WAS NOT IN THE LOCKED POSITION, THIS ALLOWED THE SHAFT TO MOVE (AXIALLY) IN AND OUT. THIS CAUSED INTERNAL COMPONENTS TO CHAFE CAUSING DEBRIS TO CONTAMINATE INSIDE OF THE MAGNETO.								
7261		SKRSKY	TMECA		TMECA	CHIP DETECTOR	CONTAMINATED		3/13/97
		S76C	ARRIEL1S		0292005250	15515	TURBINE ENG OIL		AU970282
	(AUS) NO1 ENGINE OIL SYSTEM CHIP DETECTORS CONTAMINATED - TYPE III PARTICLE (METAL SLIVER) ON MPI 1 CHIP DETECTOR - TYPE II PARTICLES (DARK DUST) ON MAGNETIC PLUGS - OIL AND FILTER CHANGEDAND ENGINE GROUND RUN SERVICEABLE								
7261		SKRSKY	TMECA		TMECA	OIL SYSTEM	CONTAMINATED		3/14/97
		S76C	ARRIEL1S		0292005250	15514	TURBINE ENG OIL		AU970287
	(AUS) NO2 ENGINE CHIP DETECTORS, MAGNETIC PLUGS AND FILTER CONTAMINATED WITH METAL PARTICLES								

(End of INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - ENGINES)

INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - COMPONENTS

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
2562		AMTR				ELT	ACTIVATED		1/31/97
		JABIRUSK				E01	EMERGENCY LOCAT		AU970217
	(AUS) ELT ACTIVATED DURING RADIO TRANSMISSION - THIS DEFECT WAS RECEIVED FROM THE AUF AND IS FOR INFORMATION ONLY								
6122		CESSNA		HARTZL	WOODWAR	GOVERNOR	FAULTY		3/18/97
		441		HCB3TN5	8971609	8971609	PROP GOV	24	AU970290
	(AUS) RH ENGINE PROPELLER GOVERNOR FAULTY								
2562		PIPER	LYC	SNSNCH		ELT	LOW POWER		4/2/97
		PA18150	O320A2B	M74DM		E01	EMERG LOCATOR		AU970316
	(AUS) ELT OUTPUT BELOW SPECIFICATION								
2562		PIPER	LYC	SNSNCH		ELT	DAMAGED		3/6/97
		PA18150	O320B2B	M74DM		ACKE01	EMERGENCY LOCAT		AU970185
	(AUS) ELT BATTERIES DAMAGED AND WORN DUE TO POOR DESIGN OF THE ELT								

(End of INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - COMPONENTS)

INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - PROPELLERS

ATA OPER	REG. NO SERIAL NO	ACFT MAKE ACFT MODEL	ENG MAKE ENG MDL	PROP MAKE PROP MDL	COMP MFG COMP MDL	PART NAME PART NUMBER	PART COND PART LOC.	TT TSO	DIFF. DATE OPER CONT NO
6110		BEECH	CONT	HARTZL	HARTZL	SPRING	FAULTY		4/2/97
		58	IO520C	PHCJ3YF2	PHCJ3YF2VF	A1588B	PROP ASSEMBLY	1505	AU970309
	(AUS) PROPELLER CONTAINED THE FOLLOWING DEFECTS:- 1. LATCH PNO B318 BROKEN. 2. LATCH BOLTS PNO A1595 (2OFF) SHEARED AND ONE BOLT BENT 3. CYLINDER PNO B2423-1 DAMAGED 4. PISTON PNO B3237 WORN 5. INCORRECT PRESSURE DECAL FITTED. PERSONNEL/MAINTENANCE ERROR								
6111		CESSNA	CONT	MCAULY		BLADE	DAMAGE	4791	9/24/97
		A150M	O200A	1A102OCM			PROP LE	1068	CA970930013
	(CAN) PROPELLER RECEIVED FOR CORROSION INSPECTION. STONE DAMAGE WAS FOUND ON THE LEADING EDGE OF THE PROPELLER BLADES, BLADES WERE TRIMMED. MOUNTING BOLTS (P/N B4622-12) WERE FOUND BENT AND WERE REPLACED.								
6111		CESSNA	CONT	MCAULY		BLADE	DAMAGE	949	9/19/97
		R172K	IO360KB	2A34C203		90DCA14	PROP LE	614	CA970930012
	(CAN) PROPELLER RECEIVED FOR CORROSION INSPECTION. PROPELLER BLADE FOUND WITH STONE DAMAGE. PROPELLER BLADE WAS TRIMMED.								
6114		CESSNA	CONT	MCAULY		SNAP RING	MISSING		7/20/97
		TU206G	TSIO520M	D3A34C402			PROPELLER BLADE	25	CA970922011
	(CAN) A PROPELLER BLADE SNAP RING DEPARTED THE BLADE DURING FLIGHT. POST FLIGHT INSPECTION REVEALED A LOOSE PROPELLER BLADE AND A BROKEN PITCH LINK.								
6110		CESSNA	CONT	MCAULY		PROPELLER	FAULTY		3/19/97
		310Q	IO470V	3AF32C87			PROPELLER ASSY	691	AU970266
	(AUS) LH PROPELLER SUSPECT OUT OF BALANCE - LH ENGINE FORWARD ENGINE MOUNT LOOSE - INVESTIGATION FOUND PROBLEM CAUSED BY BLADE ANGLES AND PROFILES								
6111		PIPER	LYC	HARTZL		CYLINDER	SLUDGED		2/12/97
		PA60600	IO540K1J5	HCC3YR		B24231	PROPELLER BLADE	2000	AU970138
	(AUS) PROPELLER CYLINDER SLUDGED RESTRICTING OPERATION								
6111		STBROS		HARTZL		BEARING	CRACKED		3/6/97
		SC7SERIES3		HCB3TN5		A1851	PROPELLER BLADE	600	AU970197
	(AUS) PROPELLER BLADE BEARING CRACKED - SUSPECT BEARING SPLIT BEARING HALVES MISMATCHED AT LAST OVERHAUL - PROPELLERS LAST OVERHAULED IN SOUTH AFRICA - PERSONNEL/MAINTENANCE ERROR - SEE MDR 97/0194 FOR FURTHER INFORMATION								
6111		STBROS		HARTZL		BLADE	CORRODED		3/6/97
		SC7SERIES3		HCB3TN5		T10282	PROPELLER BLADE	600	AU970195
	(AUS) PROPELLER BLADE BUTTS CORRODED BEYOND REPAIR - BLADES NOT PROTECTED DURING LAST OVERHAUL - SEE MDR 97/0194 FOR SIMILAR DEFECT ON OTHER PROPELLER								
6111		STBROS		HARTZL		BLADE	CORRODED		3/6/97
		SC7SERIES3		HCB3TN5		T10282H	PROPELLER BLADE	600	AU970194
	(AUS) PROPELLER BLADES CORRODED AT BUTT END - CORROSION WAS BEYOND REPAIRABLE LIMITS - INVESTIGATION FOUND THAT BLADE SHANK/RADIUS AREA HAD NOT BEEN PROTECTED AT LAST OVERHAUL WHICH WAS CARRIED OUT IN SOUTH AFRICA								

(End of INTERNATIONAL SERVICE DIFFICULTY REPORT SUMMARY - PROPELLERS)

U.S. Department
of Transportation
Federal Aviation Administration

SERVICE DIFFICULTY REPORT SUMMARY

GENERAL AVIATION - INDEX

The following information provides a tally of the Service Difficulty Reports (SDR's) contained in this weeks issue of the General Aviation SDR Summary. The totals represent only a summation of the SDR's that were submitted to the FAA, Aviation Data Systems Branch, AFS-620, and processed in time for inclusion in the Summary. The first table is a tally of the number of SDR's submitted through the indicated Flight Standards District Office (FSDO). The second table sorts the SDR's by the aircraft or equipment make and model. The heading at the top of each table provides a two digit Joint Aircraft System/Component (JASC) code grouping (e.g., JASC codes 1100 thru 1800 are represented by the heading labeled 11-18) which categorizes in general, the problem areas for each reported discrepancy.

The Flight Standards Service Difficulty Program objective is to achieve prompt and appropriate correction of conditions adversely affecting continued airworthiness of aeronautical products. This is accomplished by the collection of Service Difficulty and Malfunction or Defect Reports. SDR's are consolidation and collation into common data base where they are analyzed for trends, problems, and alert information. This information is then disseminated to the appropriate segments of the aviation community and to other FAA offices.

The number of SDR's submitted is not an indicator of the mechanical reliability or fitness of an air carrier's aircraft fleet and should not be used as such. The air carriers certificate holding office has the primary responsibility for planning, programming evaluations, and assessing the performance of operators. Questions regarding an air carrier's fleet performance should be directed to the appropriate Flight Standards District Office, Certificate Management Office, or Certificate Management Unit.

GENERAL AVIATION SUMMARY INDEX BY DISTRICT OFFICE

DISTRICT OFFICE		SDR TOTALS BY FAA ATA SYSTEM CHAPTER								
		11-18	21-29	30-38	45-49	51-57	61-67	71-79	80-85	TOTAL
AL	01	0	2	0	0	0	0	0	0	2
AL	03	0	0	0	0	0	0	0	1	1
AU	S	0	14	9	0	30	9	9	15	86
CA		0	8	1	0	0	3	8	8	28
CE	01	0	0	1	0	0	0	0	0	1
CE	05	0	1	0	0	0	0	0	0	1
CE	09	0	0	0	0	1	0	0	0	1
EA	07	0	1	0	0	0	0	0	0	1
EA	09	0	0	0	0	2	0	0	0	2
EA	13	0	0	1	0	0	0	2	0	3
EA	23	0	0	0	0	0	0	1	0	1
GL	03	0	0	0	0	0	158	0	0	158
GL	11	0	0	1	0	0	0	0	0	1
GL	15	0	0	1	0	0	0	0	0	1
GL	19	0	0	0	0	0	0	0	1	1
GL	25	0	2	0	0	0	0	0	0	2
GL	27	0	0	0	0	0	0	0	1	1
NE	05	0	1	0	0	0	0	0	0	1
NM	07	0	0	0	0	1	0	0	0	1
NM	09	0	0	0	0	0	1	1	0	2
NM	11	0	5	1	0	1	4	9	1	21
SO	13	0	0	0	0	1	0	0	0	1
SO	21	0	0	0	0	0	0	1	0	1
SW	01	0	0	0	0	0	0	1	0	1
SW	03	0	14	8	0	5	17	12	0	56
SW	05	0	2	4	0	0	3	3	0	12

DISTRICT OFFICE	SDR TOTALS BY FAA ATA SYSTEM CHAPTER								
	11-18	21-29	30-38	45-49	51-57	61-67	71-79	80-85	TOTAL
WP 05	0	0	0	0	0	0	0	1	1
WP 07	0	0	2	0	1	0	0	0	3
TOTALS	**0**	**50**	**29**	**0**	**42**	**195**	**47**	**28**	**391**

(End of GENERAL AVIATION SUMMARY INDEX by DISTRICT OFFICE Report)

GENERAL AVIATION SUMMARY INDEX by MANUFACTURER MAKE and MODEL

AIRCRAFT MAKE	AIRCRAFT MODEL	SDR TOTALS BY FAA ATA SYSTEM CHAPTER								
		11-18	21-29	30-38	45-49	51-57	61-67	71-79	80-85	TOTAL
ADAMS	A55	0	0	0	0	0	1	0	0	1
AMTR	JABIRUSK	0	1	1	0	0	0	0	0	2
AMTR	MINI500	0	0	0	0	0	0	0	1	1
AMTRMX	XP503	0	0	1	0	0	0	0	0	1
BBAVIA	7ECA	0	0	0	0	0	0	0	1	1
BBAVIA	8GCBC	0	1	0	0	0	1	0	0	2
BEECH	100BEECH	0	0	0	0	0	1	0	0	1
BEECH	200BEECH	0	0	0	0	0	0	1	0	1
BEECH	200BEECH	0	2	0	0	1	0	0	0	3
BEECH	200CBEECH	0	0	1	0	0	0	0	0	1
BEECH	3533	0	0	0	0	0	2	0	0	2
BEECH	35B33	0	0	0	0	0	1	0	0	1
BEECH	35BEECH	0	0	0	0	0	7	0	0	7
BEECH	36BEECH	0	0	0	0	0	2	0	0	2
BEECH	58	0	1	0	0	1	2	0	0	4
BEECH	58P	0	0	0	0	0	2	0	0	2
BEECH	65A90	0	0	0	0	0	0	1	1	2
BEECH	76	0	0	1	0	1	0	0	0	2
BEECH	9555	0	0	0	0	0	2	0	0	2
BEECH	95B55	0	0	0	0	0	0	0	1	1
BEECH	95C55	0	0	0	0	1	0	0	0	1
BEECH	A36	0	0	0	0	0	0	0	2	2
BEECH	B100	0	0	1	0	0	1	0	0	2
BEECH	B200C	0	0	0	0	1	0	0	0	1
BEECH	B60	0	0	0	0	0	0	1	0	1
BEECH	B90	0	0	0	0	0	2	0	0	2
BEECH	C23	0	0	1	0	0	0	0	0	1

AIRCRAFT MAKE	AIRCRAFT MODEL	SDR TOTALS BY FAA ATA SYSTEM CHAPTER 11-18	21-29	30-38	45-49	51-57	61-67	71-79	80-85	TOTAL
BEECH	D35	0	0	0	0	0	1	0	0	1
BEECH	V35	0	0	0	0	0	3	0	0	3
BEECH	V35A	0	0	0	0	0	1	0	0	1
BELL	206B	0	0	0	0	0	1	0	0	1
BELL	206B3	0	0	1	0	0	0	0	0	1
BELL	206L1	0	1	3	0	2	2	5	0	13
BELL	206L1	0	1	0	0	1	0	0	0	2
BELL	206L3	0	1	0	0	0	0	0	0	1
BELL	212	0	1	0	0	0	0	0	0	1
BELL	214ST	0	3	0	0	0	0	0	0	3
BELL	230	0	0	0	0	0	2	0	0	2
BELL	230	0	0	2	0	0	0	0	0	2
BELL	407	0	1	1	0	0	7	1	0	10
BELL	407	0	0	0	0	0	2	0	0	2
BELL	412	0	3	0	0	3	0	1	0	7
BNORM	BN2A21	0	0	0	0	1	0	0	0	1
BOEING	1072	0	0	0	0	0	1	0	0	1
BOLKMS	BK117A3	0	1	0	0	0	0	1	1	3
BOLKMS	BK117A3	0	1	2	0	0	1	0	0	4
BOLKMS	BK117A4	0	0	0	0	0	0	2	0	2
BOLKMS	BK117A4	0	0	0	0	0	0	2	0	2
BOLKMS	BK117B1	0	1	1	0	0	1	2	0	5
BOLKMS	BK117B2	0	0	1	0	0	0	0	0	1
BOLKMS	BK117C1	0	1	0	0	0	2	1	0	4
BOLKMS	BO105CBS	0	1	0	0	0	0	0	0	1
BOLKMS	BO105LSA3	0	1	0	0	0	3	2	0	6
BOLKMS	BO105S	0	5	0	0	0	0	3	0	8

AIRCRAFT MAKE	AIRCRAFT MODEL	SDR TOTALS BY FAA ATA SYSTEM CHAPTER 11-18	21-29	30-38	45-49	51-57	61-67	71-79	80-85	TOTAL
BOLKMS	BO105S	0	0	0	0	0	0	3	0	3
CESSNA	150L	0	0	0	0	0	0	0	1	1
CESSNA	152	0	0	0	0	0	2	0	0	2
CESSNA	172D	0	0	0	0	0	0	1	0	1
CESSNA	172G	0	0	0	0	1	0	0	0	1
CESSNA	172M	0	0	0	0	0	0	1	0	1
CESSNA	172N	0	0	1	0	0	0	0	0	1
CESSNA	172P	0	0	0	0	0	0	0	1	1
CESSNA	172RG	0	0	1	0	0	0	0	0	1
CESSNA	177RG	0	0	0	0	2	0	0	0	2
CESSNA	180	0	0	0	0	0	1	0	0	1
CESSNA	180A	0	0	0	0	0	1	0	0	1
CESSNA	180G	0	0	0	0	0	1	0	0	1
CESSNA	182	0	0	0	0	0	5	0	0	5
CESSNA	182D	0	0	0	0	14	0	0	0	14
CESSNA	182J	0	0	0	0	0	1	0	0	1
CESSNA	182P	0	0	0	0	0	5	0	0	5
CESSNA	182Q	0	0	1	0	0	1	0	0	2
CESSNA	188B	0	0	0	0	0	1	0	0	1
CESSNA	188CESSNA	0	0	0	0	0	8	0	0	8
CESSNA	208B	0	0	0	0	1	0	0	0	1
CESSNA	210	0	0	0	0	0	4	0	0	4
CESSNA	210L	0	0	0	0	0	0	0	1	1
CESSNA	210M	0	0	0	0	0	0	0	1	1
CESSNA	210N	0	1	1	0	0	0	1	1	4
CESSNA	310	0	0	0	0	0	17	0	0	17
CESSNA	310J	0	0	0	0	0	2	0	0	2

AIRCRAFT MAKE	AIRCRAFT MODEL	SDR TOTALS BY FAA ATA SYSTEM CHAPTER 11-18	21-29	30-38	45-49	51-57	61-67	71-79	80-85	TOTAL
CESSNA	310N	0	0	0	0	0	0	0	1	1
CESSNA	310P	0	0	0	0	0	2	0	0	2
CESSNA	310Q	0	0	0	0	0	5	0	0	5
CESSNA	310R	0	0	1	0	0	10	0	0	11
CESSNA	340A	0	0	0	0	0	2	0	0	2
CESSNA	340CESSNA	0	0	0	0	0	3	0	0	3
CESSNA	401	0	0	0	0	0	2	0	0	2
CESSNA	402A	0	0	0	0	0	1	0	0	1
CESSNA	402B	0	0	0	0	1	6	0	0	7
CESSNA	402C	0	0	0	0	0	1	0	0	1
CESSNA	404CESSNA	0	1	0	0	0	0	0	1	2
CESSNA	414	0	0	0	0	0	6	0	0	6
CESSNA	414A	0	0	0	0	0	0	0	2	2
CESSNA	414A	0	0	0	0	0	1	0	0	1
CESSNA	421	0	0	0	0	0	3	0	0	3
CESSNA	421C	0	0	0	0	1	0	1	0	2
CESSNA	441	0	0	0	0	2	2	0	0	4
CESSNA	550	0	1	0	0	0	0	0	0	1
CESSNA	550	0	1	0	0	0	0	0	0	1
CESSNA	A150M	0	0	0	0	0	1	0	0	1
CESSNA	A152	0	0	0	0	1	0	0	0	1
CESSNA	P206C	0	0	0	0	0	2	0	0	2
CESSNA	R172K	0	0	0	0	0	1	1	0	2
CESSNA	T210L	0	1	0	0	0	0	0	0	1
CESSNA	T303	0	0	0	0	0	1	0	0	1
CESSNA	TU206G	0	0	0	0	0	1	0	0	1
CESSNA	U206F	0	1	0	0	0	0	0	0	1

AIRCRAFT MAKE	AIRCRAFT MODEL	SDR TOTALS BY FAA ATA SYSTEM CHAPTER 11-18	21-29	30-38	45-49	51-57	61-67	71-79	80-85	TOTAL
CESSNA	U206F	0	0	0	0	0	6	0	0	6
CESSNA	U206G	0	4	0	0	0	0	0	0	4
CHRIS	A1	0	0	0	0	0	0	1	0	1
CONAER	LA4200	0	0	0	0	0	1	0	0	1
DHAV	DHC2*	0	0	0	0	0	0	0	1	1
DHAV	DHC2MK1	0	0	0	0	0	0	2	0	2
DHAV	DHC3	0	1	0	0	0	0	0	0	1
DHAV	DHC3	0	0	0	0	0	4	0	0	4
DHAV	DHC6300	0	0	1	0	0	0	0	0	1
DHAV	DHC6300	0	0	0	0	0	4	0	0	4
DHAVXX	DH82AROBRTSN	0	0	0	0	0	0	2	3	5
EMB	EMB110P1	0	1	0	0	0	0	0	0	1
GROB	G115C	0	0	1	0	0	0	0	0	1
GULSTM	114	0	0	0	0	0	0	1	0	1
GULSTM	500S	0	1	0	0	0	0	0	0	1
GULSTM	690	0	0	0	0	0	2	0	0	2
HUGHES	269C	0	0	1	0	0	0	0	0	1
HUGHES	369D	0	0	0	0	0	0	1	0	1
HUGHES	500N	0	0	1	0	0	0	0	0	1
MAULE	M5200	0	0	0	0	0	1	0	0	1
MOONEY	M20E	0	0	0	0	0	0	0	1	1
MOONEY	M20J	0	0	0	0	0	0	0	1	1
MTSBSI	MU2*	0	0	0	0	0	1	0	0	1
MTSBSI	MU2B60	0	0	0	0	0	0	1	0	1
PARTEN	P68B	0	0	0	0	0	0	0	1	1
PARTEN	P68TCOBS	0	0	0	0	0	0	1	0	1
PIPER	PA18150	0	2	0	0	0	0	1	0	3

AIRCRAFT MAKE	AIRCRAFT MODEL	SDR TOTALS BY FAA ATA SYSTEM CHAPTER 11-18	21-29	30-38	45-49	51-57	61-67	71-79	80-85	TOTAL
PIPER	PA23150	0	0	0	0	0	1	0	0	1
PIPER	PA23250	0	0	0	0	0	2	0	0	2
PIPER	PA24400	0	0	0	0	0	2	0	0	2
PIPER	PA28161	0	0	0	0	0	0	0	1	1
PIPER	PA28180	0	0	1	0	0	0	0	0	1
PIPER	PA28R200	0	0	0	0	0	1	0	0	1
PIPER	PA31	0	0	0	0	0	3	0	0	3
PIPER	PA31310	0	0	0	0	2	0	0	0	2
PIPER	PA31350	0	0	0	0	0	0	0	1	1
PIPER	PA31350	0	4	0	0	0	0	0	0	4
PIPER	PA31T	0	0	1	0	0	0	0	0	1
PIPER	PA32300	0	0	0	0	0	2	0	0	2
PIPER	PA32R300	0	0	0	0	0	1	0	0	1
PIPER	PA32R301T	0	1	0	0	0	0	0	0	1
PIPER	PA34200	0	0	0	0	2	1	0	0	3
PIPER	PA34200T	0	1	0	0	0	0	0	1	2
PIPER	PA42720	0	0	0	0	0	0	1	0	1
PIPER	PA44180	0	0	0	0	0	0	1	0	1
PIPER	PA44180	0	0	0	0	1	0	0	0	1
PIPER	PA44180T	0	0	0	0	0	1	0	0	1
PIPER	PA46350P	0	1	0	0	0	0	0	0	1
PIPER	PA60600	0	0	0	0	0	0	0	1	1
PIPER	PA60600	0	0	0	0	0	1	0	1	2
RKWELL	700	0	0	0	0	0	0	1	0	1
SKRSKY	S76A	0	0	1	0	0	2	1	0	4
SKRSKY	S76A	0	0	0	0	0	1	0	0	1
SKRSKY	S76C	0	0	0	0	0	0	2	0	2

AIRCRAFT MAKE	AIRCRAFT MODEL	SDR TOTALS BY FAA ATA SYSTEM CHAPTER 11-18	21-29	30-38	45-49	51-57	61-67	71-79	80-85	TOTAL
SNIAS	AS350B2	0	0	0	0	0	2	0	0	2
SOCATA	TB10TOBAGO	0	0	0	0	2	0	0	0	2
STBROS	SC7SERIES3	0	0	0	0	0	3	0	0	3
UNIVAR	1082	0	0	0	0	0	3	0	0	3
UNIVAR	415D	0	1	0	0	0	0	0	0	1
TOTALS		**0**	**50**	**29**	**0**	**42**	**195**	**47**	**28**	**391**

(End of AIR CARRIER SUMMARY INDEX by OPERATOR Report)

JOINT AIRCRAFT SYSTEM/COMPONENT CODE TABLE

PREFACE

The Joint Aircraft System/Component (JASC) Code Table is a modified version of the Air Transport Association of America (ATA), Specification 100 code. It was developed by the Federal Aviation Administration's (FAA), Aviation Data Systems Branch (AFS-620). Technical support was provided by the Galaxy Scientific Corporation, and various representatives of the air carrier and general aviation community.

Over the past four years, the JASC format of the ATA Spec 100 code has gained widespread industry acceptance. In a harmonized effort, the FAA's counterparts in Australia and Canada have adopted the JASC code with only a few exceptions. Some Canadian aircraft manufacturers have also recently adopted this new stardard.

This code table is constructed by using the new JASC four (4) digit code, along with an abbreviated code title. The abbreviated titles have been modified in some cases to clarify the intended use of the accompanying code. This table can be used as a quick reference chart, to assist in the coding and review of aircraft structures or systems data (i.e., Service Difficulty Report (SDR), Accident/Incident Report).

The current coding scheme used in the JASC code was introduced in May 1991, for the technical classification of SDR's. Its predecessor, the FAA aircraft system/component code, was a similar but more complex eight-digit code which was developed over 25 years ago. It was constructed around the computer technology of that period. It consisted of a four digit numerical code plus a four alpha character code to make data retrieval possible. Since that time, computer technology has advanced many fold. Reducing the code from eight to four characters simplifies coding, and in some cases, makes JASC coding match the ATA Specification 100 first three digits, which are used to identify aircraft systems. The ATA code does not reference the fourth digit, so it is free to be used for identifying components.

The JASC code aircraft structural section has increased due to problems inherent with aging aircraft. As an example, FAA code 5301 SXBD was expanded to 20 items due to the high rate of reporting in this area (8021 structural reports were received in 1989). In some instances, there was very little reporting and codes were combined into other systems if the safety impact was not significant. The overall reduction in codes has been from 568 FAA codes to 488 JASC codes, with the significant increase being in the structural area as stated earlier.

The JASC code divides the engine section into two major code groups to separate the turbine and reciprocating engines. The codes for the turbine engines are in JASC Chapter 72, Turbine/Turboprop Engine. The codes for the reciprocating engines are now exclusively found in JASC Chapter 85, Reciprocating Engine.

The other major deviation from ATA Spec 100 is in ATA section 2730, specifically involves the stall warning system. Early technology (primarily on smaller aircraft) directly linked the sensing of flight attitude to one of the components which furnished the means of manually controlling the flight attitude characteristics (elevator). Today, most large transport category aircraft utilize electronic units to sense the change in the environmental condition called stall, and use the data to influence navigation. ATA section 3410, Flight Environment Data, includes high speed warning in its code definition. Stall warning (low speed) is the reciprocal term of high speed warning, so its filing under the same code appears more logical. Thus, with the JASC code it was decided to move the stall warning system to Chapter 34 under the separate code JASC code 3418, Stall Warning System.

The FAA is continuing to pursue worldwide involvement from operators and manufacturers in addressing the need for international standardization of aircraft system/component codes. The ultimate goal is to develop a universal aircraft/component numbering standard which can be used in the manufacturer's maintenance manual, wiring diagram manual, system manuals and illustrated parts catalog. This harmonized standard must be a usable standard for the aircraft manufacturers, air carrier operators and the general aviation community.

We welcome comments and feedback regarding the possible forming of working groups to achieve this long range consideration of possibly harmonizing the ATA Specification 100 code and the JASC code. Comments may be directed to the FAA, Aviation Data Sytem Branch, AFS-620, P.O. Box 25082, Oklahoma City, OK 73125.

JOINT AIRCRAFT SYSTEM/COMPONENT CODE TABLE

JASC/ TITLE

11 PLACARDS AND MARKINGS

1100 PLACARDS AND MARKINGS

12 SERVICING

1210 FUEL SERVICING
1220 OIL SERVICING
1230 HYDRAULIC FLUID SERVICING
1240 COOLANT SERVICING

18 HELICOPTER VIBRATION

1800 HELICOPTER VIB/NOISE ANALYSIS
1810 HELICOPTER VIBRATION ANALYSIS
1820 HELICOPTER NOISE ANALYSIS

21 AIR CONDITIONING

2100 AIR CONDITIONING SYSTEM
2110 CABIN COMPRESSOR SYSTEM
2120 AIR DISTRIBUTION SYSTEM
2121 AIR DISTRIBUTION FAN
2130 CABIN PRESSURE CONTROL SYSTEM
2131 CABIN PRESSURE CONTROLLER
2132 CABIN PRESSURE INDICATOR
2133 PRESSURE REGUL/OUTFLOW VALVE
2134 CABIN PRESSURE SENSOR
2140 HEATING SYSTEM
2150 CABIN COOLING SYSTEM
2160 CABIN TEMPERATURE CONTROL SYSTEM
2161 CABIN TEMPERATURE CONTROLLER
2162 CABIN TEMPERATURE INDICATOR
2163 CABIN TEMPERATURE SENSOR
2170 HUMIDITY CONTROL SYSTEM

22 AUTO FLIGHT

2200 AUTO FLIGHT SYSTEM
2210 AUTOPILOT SYSTEM
2211 AUTOPILOT COMPUTER
2212 ALTITUDE CONTROLLER
2213 FLIGHT CONTROLLER
2214 AUTOPILOT TRIM INDICATOR
2215 AUTOPILOT MAIN SERVO
2216 AUTOPILOT TRIM SERVO
2220 SPEED-ATTITUDE CORRECT. SYSTEM
2230 AUTO THROTTLE SYSTEM
2250 AERODYNAMIC LOAD ALLEVIATING

23 COMMUNICATIONS

2300 COMMUNICATIONS SYSTEM
2310 HF COMMUNICATION SYSTEM
2311 UHF COMMUNICATION SYSTEM
2312 VHF COMMUNICATION SYSTEM
2320 DATA TRANSMISSION AUTO CALL
2330 ENTERTAINMENT SYSTEM
2340 INTERPHONE & PA SYSTEM
2350 AUDIO INTEGRATING SYSTEM
2360 STATIC DISCHARGE SYSTEM
2370 AUDIO/VIDEO MONITORING

24 ELECTRICAL POWER

2400 ELECTRICAL POWER SYSTEM
2410 ALTERNATOR-GENERATOR DRIVE
2420 AC GENERATION SYSTEM
2421 AC GENERATOR-ALTERNATOR
2422 AC INVERTER
2423 PHASE ADAPTER

24 ELECTRICAL POWER CONT'D

2424 AC REGULATOR
2425 AC INDICATING SYSTEM
2430 DC GENERATING SYSTEM
2431 BATTERY OVERHEAT WARN. SYSTEM
2432 BATTERY/CHARGER SYSTEM
2433 DC RECTIFIER-CONVERTER
2434 DC GENERATOR-ALTERNATOR
2435 STARTER-GENERATOR
2436 DC REGULATOR
2437 DC INDICATING SYSTEM
2440 EXTERNAL POWER SYSTEM
2450 AC POWER DISTRIBUTION SYSTEM
2460 DC POWER/DISTRIBUTION SYSTEM

25 EQUIPMENT/FURNISHINGS

2500 CABIN EQUIPMENT/FURNISHINGS
2510 FLIGHT COMPARTMENT EQUIPMENT
2520 PASSENGER COMPARTMENT EQUIPMENT
2530 BUFFET/GALLEYS
2540 LAVATORIES
2550 CARGO COMPARTMENTS
2551 AGRICULTURAL SPRAY SYSTEM
2560 EMERGENCY EQUIPMENT
2561 LIFE JACKET
2562 EMERGENCY LOCATOR BEACON
2563 PARACHUTE
2564 LIFE RAFT
2565 ESCAPE SLIDE
2570 ACCESSORY COMPARTMENT
2571 BATTERY BOX STRUCTURE
2572 ELECTRONIC SHELF SECTION

26 FIRE PROTECTION

2600 FIRE PROTECTION SYSTEM
2610 DETECTION SYSTEM
2611 SMOKE DETECTION
2612 FIRE DETECTION
2613 OVERHEAT DETECTION
2620 EXTINGUISHING SYSTEM
2621 FIRE BOTTLE, FIXED
2622 FIRE BOTTLE, PORTABLE

27 FLIGHT CONTROLS

2700 FLIGHT CONTROL SYSTEM
2701 CONTROL COLUMN SECTION
2710 AILERON CONTROL SYSTEM
2711 AILERON TAB CONTROL SYSTEM
2720 RUDDER CONTROL SYSTEM
2721 RUDDER TAB CONTROL SYSTEM
2722 RUDDER ACTUATOR
2730 ELEVATOR CONTROL SYSTEM
2731 ELEVATOR TAB CONTROL SYSTEM
2740 STABILIZER CONTROL SYSTEM
2741 STABILIZER POSITION INDICATING
2742 STABILIZER ACTUATOR
2750 TE FLAP CONTROL SYSTEM
2751 TE FLAP POSITION IND. SYSTEM
2752 TE FLAP ACTUATOR
2760 DRAG CONTROL SYSTEM
2761 DRAG CONTROL ACTUATOR
2770 GUST LOCK/DAMPER SYSTEM
2780 LE FLAP CONTROL SYSTEM
2781 LE FLAP POSITION IND. SYSTEM
2782 LE FLAP ACTUATOR

28 FUEL

2800 AIRCRAFT FUEL SYSTEM
2810 FUEL STORAGE
2820 ACFT FUEL DISTRIB. SYSTEM
2821 ACFT FUEL FILTER/STRAINER
2822 FUEL BOOST PUMP
2823 FUEL SELECTOR/SHUTOFF VALVE
2824 FUEL TRANSFER VALVE
2830 FUEL DUMP SYSTEM
2840 ACFT FUEL INDICATING
2841 FUEL QUANTITY INDICATOR
2842 FUEL QUANTITY SENSOR
2843 FUEL TEMPERATURE INDICATING
2844 FUEL PRESSURE INDICATOR

29 HYDRAULIC POWER

2900 HYDRAULIC POWER SYSTEM
2910 HYDRAULIC, MAIN SYSTEM
2911 HYDRAULIC POWER-ACCUMULATOR-MAIN
2912 HYDRAULIC FILTER-MAIN SYSTEM
2913 HYDRAULIC PUMP. ELECT-ENG.-MAIN
2914 HYDRAULIC HANDPUMP-MAIN
2915 HYDRAULIC PRESSURE RELIEF VLV-MAIN
2916 HYDRAULIC RESERVOIR-MAIN
2917 HYDRAULIC PRESSURE REGULATOR-MAIN
2920 HYDRAULIC, AUXILIARY SYSTEM
2921 HYDRAULIC ACCUMULATOR-AUXILIARY
2922 HYDRAULIC FILTER-AUXILIARY
2923 HYDRAULIC PUMP-AUXILIARY
2925 HYDRAULIC PRESSURE RELIEF-AUXILIARY
2926 HYDRAULIC RESERVOIR-AUXILIARY
2927 HYDRAULIC PRESSURE REGULATOR-AUX.
2930 HYDRAULIC SYSTEM INDICATING
2931 HYDRAULIC PRESSURE INDICATOR
2932 HYDRAULIC PRESSURE SENSOR
2933 HYDRAULIC QUANTITY INDICATOR
2934 HYDRAULIC QUANTITY SENSOR

30 ICE AND RAIN PROTECTION

3000 ICE/RAIN PROTECTION SYSTEM
3010 AIRFOIL ANTI/DE-ICE SYSTEM
3020 AIR INTAKE ANTI/DE-ICE SYSTEM
3030 PITOT/STATIC ANTI-ICE SYSTEM
3040 WINDSHIELD/DOOR RAIN/ICE REMOVAL
3050 ANTENNA/RADOME ANTI-ICE/DE-ICE SYSTEM
3060 PROP/ROTOR ANTI-ICE/DE-ICE SYSTEM
3070 WATER LINE ANTI-ICE SYSTEM
3080 ICE DETECTION

31 INSTRUMENTS

3100 INDICATING/RECORDING SYSTEM
3110 INSTRUMENT PANEL
3120 INDEPENDENT INSTRUMENTS (CLOCK, ETC.)
3130 DATA RECORDERS (FLT/MAINT)
3140 CENTRAL COMPUTERS (EICAS)
3150 CENTRAL WARNING
3160 CENTRAL DISPLAY
3170 AUTOMATIC DATA

32 LANDING GEAR

3200 LANDING GEAR SYSTEM
3201 LANDING GEAR/WHEEL FAIRING
3210 MAIN LANDING GEAR
3211 MAIN LANDING GEAR ATTACH SECTION
3212 EMERGENCY FLOTATION SECTION
3213 MAIN LANDING GEAR STRUT/AXLE/TRUCK
3220 NOSE/TAIL LANDING GEAR
3221 NOSE/TAIL LANDING GEAR ATTACH SECTION
3222 NOSE/TAIL LANDING GEAR STRUT/AXLE
3230 LANDING GEAR RETRACT/EXT. SYSTEM
3231 LANDING GEAR DOOR RETRACT SECTION
3232 LANDING GEAR DOOR ACTUATOR
3233 LANDING GEAR ACTUATOR
3234 LANDING GEAR SELECTOR
3240 LANDING GEAR BRAKE SYSTEM
3241 BRAKE ANTI-SKID SECTION
3242 BRAKE
3243 MASTER CYL/BRAKE VALVE
3244 TIRE
3245 TIRE TUBE
3246 WHEEL/SKI/FLOAT
3250 LANDING GEAR STEERING SYSTEM
3251 STEERING UNIT
3252 SHIMMY DAMPER
3260 LANDING GEAR POSITION & WARNING
3270 AUXILIARY GEAR (TAIL SKID)

33 LIGHTS

3300 LIGHTING SYSTEM
3310 FLIGHT COMPARTMENT LIGHTING
3320 PASSENGER COMPARTMENT LIGHTING
3330 CARGO COMPARTMENT LIGHTING
3340 EXTERIOR LIGHTING
3350 EMERGENCY LIGHTING

34 NAVIGATION

3400 NAVIGATION SYSTEM
3410 FLIGHT ENVIRONMENT DATA
3411 PITOT/STATIC SYSTEM
3412 OUTSIDE AIR TEMP. IND./SENSOR
3413 RATE OF CLIMB INDICATOR
3414 AIRSPEED/MACH INDICATING
3415 HIGH SPEED WARNING
3416 ALTIMETER, BAROMETRIC/ENCODER

34 NAVIGATION CONT'D

3417 AIR DATA COMPUTER
3418 STALL WARNING SYSTEM
3420 ATTITUDE AND DIRECTION DATA SYSTEM
3421 ATTITUDE GYRO & IND. SYSTEM
3422 DIRECTIONAL GYRO & IND. SYSTEM
3423 MAGNETIC COMPASS
3424 TURN & BANK/RATE OF TURN INDICATOR
3425 INTEGRATED FLT. DIRECTOR SYSTEM
3430 LANDING & TAXI AIDS
3431 LOCALIZER/VOR SYSTEM
3432 GLIDE SLOPE SYSTEM
3433 MICROWAVE LANDING SYSTEM
3434 MARKER BEACON SYSTEM
3435 HEADS UP DISPLAY SYSTEM
3436 WIND SHEAR DETECTION SYSTEM
3440 INDEPENDENT POS. DETERMINING SYSTEM
3441 INERTIAL GUIDANCE SYSTEM
3442 WEATHER RADAR SYSTEM
3443 DOPPLER SYSTEM
3444 GROUND PROXIMITY SYSTEM
3445 AIR COLLISION AVOIDANCE SYSTEM (TCAS)
3446 NON RADAR WEATHER SYSTEM
3450 DEPENDENT POSITION DETERMINING SYSTEM
3451 DME/TACAN SYSTEM
3452 ATC TRANSPONDER SYSTEM
3453 LORAN SYSTEM
3454 VOR SYSTEM
3455 ADF SYSTEM
3456 OMEGA NAVIGATION SYSTEM
3457 GLOBAL POSITIONING SYSTEM
3460 FLIGHT MANAGE. COMPUTING SYSTEM

35 OXYGEN

3500 OXYGEN SYSTEM
3510 CREW OXYGEN SYSTEM
3520 PASSENGER OXYGEN SYSTEM
3530 PORTABLE OXYGEN SYSTEM

36 PNEUMATIC

3600 PNEUMATIC SYSTEM
3610 PNEUMATIC DISTRIBUTION SYSTEM
3620 PNEUMATIC INDICATING SYSTEM

37 VACUUM

3700 VACUUM SYSTEM
3710 VACUUM DISTRIBUTION SYSTEM
3720 VACUUM INDICATING SYSTEM

38 WATER/WASTE

3800 WATER & WASTE SYSTEM
3810 POTABLE WATER SYSTEM
3820 WASH WATER SYSTEM
3830 WASTE DISPOSAL SYSTEM
3840 AIR SUPPLY (WATER PRESS. SYSTEM)

45 CENTRAL MAINT. SYSTEM

4500 CENTRAL MAINT. COMPUTER

49 AIRBORNE AUXILIARY POWER

4900 AIRBORNE APU SYSTEM
4910 APU COWLING/CONTAINMENT
4920 APU CORE ENGINE
4930 APU ENGINE FUEL & CONTROL
4940 APU START/IGNITION SYSTEM
4950 APU BLEED AIR SYSTEM
4960 APU CONTROLS
4970 APU INDICATING SYSTEM
4980 APU EXHAUST SYSTEM
4990 APU OIL SYSTEM

51 STANDARD PRACTICES/STRUCTURES

5100 STANDARD PRACTICES/STRUCTURES
5101 AIRCRAFT STRUCTURES
5102 BALLOON REPORTS

52 DOORS

5200 DOORS
5210 PASSENGER/CREW DOORS
5220 EMERGENCY EXIT
5230 CARGO/BAGGAGE DOORS
5240 SERVICE DOORS
5241 GALLEY DOORS
5242 E/E COMPARTMENT DOORS
5243 HYDRAULIC COMPARTMENT DOORS
5244 ACCESSORY COMPARTMENT DOORS
5245 AIR CONDITIONING COMPART. DOORS
5246 FLUID SERVICE DOORS
5247 APU DOORS
5248 TAIL CONE DOORS
5250 FIXED INNER DOORS
5260 ENTRANCE STAIRS
5270 DOOR WARNING SYSTEM
5280 LANDING GEAR DOORS

53 FUSELAGE

5300 FUSELAGE STRUCTURE (GENERAL)
5301 AERIAL TOW EQUIPMENT
5302 ROTORCRAFT TAIL BOOM
5310 FUSELAGE MAIN STRUCTURE
5311 FUSELAGE MAIN FRAME
5312 FUSELAGE MAIN BULKHEAD
5313 FUSELAGE MAIN LONGERON/STRINGER
5314 FUSELAGE MAIN KEEL
5315 FUSELAGE MAIN FLOOR BEAM
5320 FUSELAGE MISCELLANEOUS STRUCTURE
5321 FUSELAGE FLOOR PANEL
5322 FUSELAGE INTERNAL MOUNT STRUCTURE
5323 FUSELAGE INTERNAL STAIRS
5324 FUSELAGE FIXED PARTITIONS
5330 FUSELAGE MAIN PLATE/SKIN
5340 FUSELAGE MAIN ATTACH FITTINGS
5341 WING ATTACH FITTINGS (ON FUSELAGE)
5342 STABILIZER ATTACH FITTINGS
5343 LANDING GEAR ATTACH FITTINGS
5344 FUSELAGE DOOR HINGES
5345 FUSELAGE EQUIPMENT ATTACH FITTINGS
5346 POWERPLANT ATTACH FITTINGS
5347 SEAT/CARGO ATTACH FITTINGS
5350 FUSELAGE AERODYNAMIC FAIRINGS

54 NACELLES/PYLONS

5400 NACELLE/PYLON STRUCTURE
5410 MAIN FRAME (ON NACELLE/PYLON)
5411 FRAME/SPAR/RIB(NACELLE/PYLON)
5412 BULKHEAD/FIREWALL (NAC/PYLON)
5413 LONGERON/STRINGER (NAC/PYLON)
5414 PLATE SKIN (NAC/PYLONS)
5415 ATTACH FITTINGS (NAC/PYLON)

55 STABILIZERS

5500 EMPENNAGE STRUCTURE
5510 HORIZONTAL STABILIZER STRUCTURE
5511 HORIZONTAL STABILIZER SPAR/RIB
5512 HORIZONTAL STABILIZER PLATE/SKIN
5513 HORIZONTAL STABILIZER TAB STRUCTURE
5520 ELEVATOR STRUCTURE

55 STABILIZERS CONT'D

5521 ELEVATOR SPAR/RIB STRUCTURE
5522 ELEVATOR PLATES/SKIN STRUCTURE
5523 ELEVATOR TAB STRUCTURE
5530 VERTICAL STABILIZER STRUCTURE
5531 VERTICAL STABILIZER SPAR/RIB STRUCTURE
5532 VERTICAL STABILIZER PLATES/SKIN
5533 VENTRAL STRUCTURE (ON VERT. STAB)
5540 RUDDER STRUCTURE
5541 RUDDER SPAR/RIB STRUCTURE
5542 RUDDER PLATE/SKIN STRUCTURE
5543 RUDDER TAB STRUCTURE
5550 EMPENNAGE FLT. CONT. ATTACH FITTING
5551 HORIZONTAL STABILIZER ATTACH FITTING
5552 ELEVATOR/TAB ATTACH FITTINGS
5553 VERT. STAB. ATTACH FITTINGS
5554 RUDDER/TAB ATTACH FITTINGS

56 WINDOWS

5600 WINDOW/WINDSHIELD SYSTEM
5610 FLIGHT COMPARTMENT WINDOWS
5620 PASSENGER COMPARTMENT WINDOWS
5630 DOOR WINDOWS
5640 INSPECTION WINDOWS

57 WINGS

5700 WING STRUCTURE
5710 WING MAIN FRAME STRUCTURE
5711 WING SPAR STRUCTURE
5712 WING RIB STRUCTURE
5713 WING LONGERON/STRINGER
5714 WING CENTER BOX
5720 WING MISCELLANEOUS STRUCTURE
5730 WING PLATES/SKINS
5740 WING ATTACH FITTINGS
5741 WING, FUSELAGE ATTACH FITTINGS
5742 WING, NAC/PYLON ATTACH FITTINGS
5743 WING, LANDING GEAR ATTACH FITTINGS
5744 CONTROL SURFACE ATTACH FITTINGS
5750 WING CONTROL SURFACE STRUCTURE
5751 AILERON STRUCTURE
5752 AILERON TAB STRUCTURE
5753 TE FLAP STRUCTURE
5754 LEADING EDGE DEVICE STRUCTURE
5755 SPOILER STRUCTURE

61 PROPELLERS/PROPULSORS

6100 PROPELLER SYSTEM
6110 PROPELLER ASSEMBLY
6111 PROPELLER BLADE SECTION
6112 PROPELLER DE-ICE BOOT SECTION
6113 PROPELLER SPINNER SECTION
6114 PROPELLER HUB SECTION
6120 PROPELLER CONTROL SYSTEM
6121 PROPELLER SYNCHRONIZER SECTION
6122 PROPELLER GOVERNOR
6123 PROPELLER FEATHERING/REVERSING
6130 PROPELLER BRAKING
6140 PROPELLER INDICATING SYSTEM

62 MAIN ROTOR

6200 MAIN ROTOR SYSTEM
6210 MAIN ROTOR BLADES
6220 MAIN ROTOR HEAD
6230 MAIN ROTOR MAST/SWASHPLATE
6240 MAIN ROTOR INDICATING SYSTEM

63 MAIN ROTOR DRIVE

6300 MAIN ROTOR DRIVE SYSTEM
6310 ENGINE/TRANSMISSION COUPLING
6320 MAIN ROTOR GEARBOX
6321 MAIN ROTOR BRAKE
6322 ROTORCRAFT COOLING FAN SYSTEM
6330 MAIN ROTOR TRANSMISSION MOUNT
6340 ROTOR DRIVE INDICATING SYSTEM

64 TAIL ROTOR

6400 TAIL ROTOR SYSTEM
6410 TAIL ROTOR BLADE
6420 TAIL ROTOR HEAD
6440 TAIL ROTOR INDICATING SYSTEM

65 TAIL ROTOR DRIVE

6500 TAIL ROTOR DRIVE SYSTEM
6510 TAIL ROTOR DRIVE SHAFT
6520 TAIL ROTOR GEARBOX
6540 TAIL ROTOR DRIVE INDICATING SYSTEM

67 ROTORS FLIGHT CONTROL

6700 ROTORCRAFT FLIGHT CONTROL
6710 MAIN ROTOR CONTROL
6711 TILT ROTOR FLIGHT CONTROL
6720 TAIL ROTOR CONTROL SYSTEM
6730 ROTORCRAFT SERVO SYSTEM

71 POWERPLANT

7100 POWERPLANT SYSTEM
7110 ENGINE COWLING SYSTEM
7111 COWL FLAP SYSTEM
7112 ENGINE AIR BAFFLE SECTION
7120 ENGINE MOUNT SECTION
7130 ENGINE FIRESEALS
7160 ENGINE AIR INTAKE SYSTEM
7170 ENGINE DRAINS

72 TURBINE/TURBOPROP ENGINE

7200 ENGINE (TURBINE/TURBOPROP)
7210 TURBINE ENGINE REDUCTION GEAR
7220 TURBINE ENGINE AIR INLET SECTION
7230 TURBINE ENGINE COMPRESSOR SECTION
7240 TURBINE ENGINE COMBUSTION SECTION
7250 TURBINE SECTION
7260 TURBINE ENGINE ACCESSORY DRIVE
7261 TURBINE ENGINE OIL SYSTEM
7270 TURBINE ENGINE BYPASS SECTION

73 ENGINE FUEL & CONTROL

7300 ENGINE FUEL & CONTROL
7310 ENGINE FUEL DISTRIBUTION
7311 ENGINE FUEL-OIL COOLER
7312 FUEL HEATER
7313 FUEL INJECTOR NOZZLE
7314 ENGINE FUEL PUMP
7320 FUEL CONTROLLING SYSTEM
7321 FUEL CONTROL/ELECTRONIC
7322 FUEL CONTROL/CARBURETOR
7323 TURBINE GOVERNOR
7324 FUEL DIVIDER
7330 ENGINE FUEL INDICATING SYSTEM
7331 FUEL FLOW INDICATING
7332 FUEL PRESSURE INDICATING
7333 FUEL FLOW SENSOR
7334 FUEL PRESSURE SENSOR

74 IGNITION

7400 IGNITION SYSTEM
7410 IGNITION POWER SUPPLY
7411 LOW TENSION COIL
7412 EXCITER
7413 INDUCTION VIBRATOR
7414 MAGNETO/DISTRIBUTOR
7420 IGNITION HARNESS (DISTRIBUTION)
7421 SPARK PLUG/IGNITER
7430 IGNITION SWITCHING

75 AIR

7500 ENGINE BLEED AIR SYSTEM
7510 ENGINE ANTI-ICING SYSTEM
7520 ENGINE COOLING SYSTEM
7530 COMPRESSOR BLEED CONTROL
7531 COMPRESSOR BLEED GOVERNOR
7532 COMPRESSOR BLEED VALVE
7540 BLEED AIR INDICATING SYSTEM

76 ENGINE CONTROLS

7600 ENGINE CONTROLS
7601 ENGINE SYNCHRONIZING
7602 MIXTURE CONTROL
7603 POWER LEVER
7620 ENGINE EMERGENCY SHUTDOWN SYSTEM

77 ENGINE INDICATING

7700 ENGINE INDICATING SYSTEM
7710 POWER INDICATING SYSTEM
7711 ENGINE PRESSURE RATIO (EPR)
7712 ENGINE BMEP/TORQUE INDICATING
7713 MANIFOLD PRESSURE (MP) INDICATING
7714 ENGINE RPM INDICATING SYSTEM
7720 ENGINE TEMP. INDICATING SYSTEM
7721 CYLINDER HEAD TEMP (CHT) INDICATING
7722 ENG. EGT/TIT INDICATING SYSTEM
7730 ENGINE IGNITION ANALYZER SYSTEM
7731 ENGINE IGNITION ANALYZER
7732 ENGINE VIBRATION ANALYZER
7740 ENGINE INTEGRATED INSTRUMENT SYSTEM

78 ENGINE EXHAUST

7800 ENGINE EXHAUST SYSTEM
7810 ENGINE COLLECTOR/TAILPIPE/NOZZLE
7820 ENGINE NOISE SUPPRESSOR
7830 THRUST REVERSER

79 ENGINE OIL

7900 ENGINE OIL SYSTEM (AIRFRAME)
7910 ENGINE OIL STORAGE (AIRFRAME)
7920 ENGINE OIL DISTRIBUTION (AIRFRAME)
7921 ENGINE OIL COOLER
7922 ENGINE OIL TEMP. REGULATOR
7923 OIL SHUTOFF VALVE
7930 ENGINE OIL INDICATING SYSTEM
7931 ENGINE OIL PRESSURE
7932 ENGINE OIL QUANTITY
7933 ENGINE OIL TEMPERATURE

80 STARTING

8000 ENGINE STARTING SYSTEM
8010 ENGINE CRANKING
8011 ENGINE STARTER
8012 ENGINE START VALVES/CONTROLS

81 TURBOCHARGING

8100 EXHAUST TURBINE SYSTEM (RECIP)
8110 POWER RECOVERY TURBINE (RECIP)
8120 EXHAUST TURBOCHARGER

82 WATER INJECTION

8200 WATER INJECTION SYSTEM

83 ACCESSORY GEARBOXES

8300 ACCESSORY GEARBOXES

85 RECIPROCATING ENGINE

8500 ENGINE (RECIPROCATING)
8510 RECIPROCATING ENGINE FRONT SECTION
8520 RECIPROCATING ENGINE POWER SECTION
8530 RECIPROCATING ENGINE CYLINDER SECTION
8540 RECIPROCATING ENGINE REAR SECTION
8550 RECIPROCATING ENGINE OIL SYSTEM

MECHANICS CREED

UPON MY HONOR I swear that I shall hold in sacred trust the rights and privileges conferred upon me as a certified mechanic. Knowing full well that the safety and lives of others are dependent upon my skill and judgment, I shall never knowingly subject others to risks which I would not be willing to assume for myself, or for those dear to me.

IN DISCHARGING this trust, I pledge myself never to undertake work or approve work which I feel to be beyond the limits of my knowledge; nor shall I allow any non-certificated superior to persuade me to approve aircraft or equipment as airworthy against my better judgment; nor shall I permit my judgment to be influenced by money or other personal gain; nor shall I pass as airworthy aircraft or equipment about which I am in doubt, either as a result of direct inspection or uncertainty regarding the ability of others who have worked on it to accomplish their work satisfactorily.

I REALIZE the grave responsibility which is mine as a certified airman, to exercise my judgment on the airworthiness of aircraft and equipment. I, therefore, pledge unyielding adherence to these precepts for the advancement of aviation and for the dignity of my vocation.